

INSTALLER/CONSUMER SAFETY INFORMATION

**PLEASE READ THIS MANUAL
BEFORE INSTALLING AND
USING APPLIANCE**

WARNING!

**IF THE INFORMATION IN THIS
MANUAL IS NOT FOLLOWED
EXACTLY, A FIRE OR EXPLO-
SION MAY RESULT CAUSING
PROPERTY DAMAGE, PER-
SONAL INJURY OR LOSS OF
LIFE.**

FOR YOUR SAFETY

**Installation and service must
be performed by a qualified
installer, service agency or
the gas supplier.**

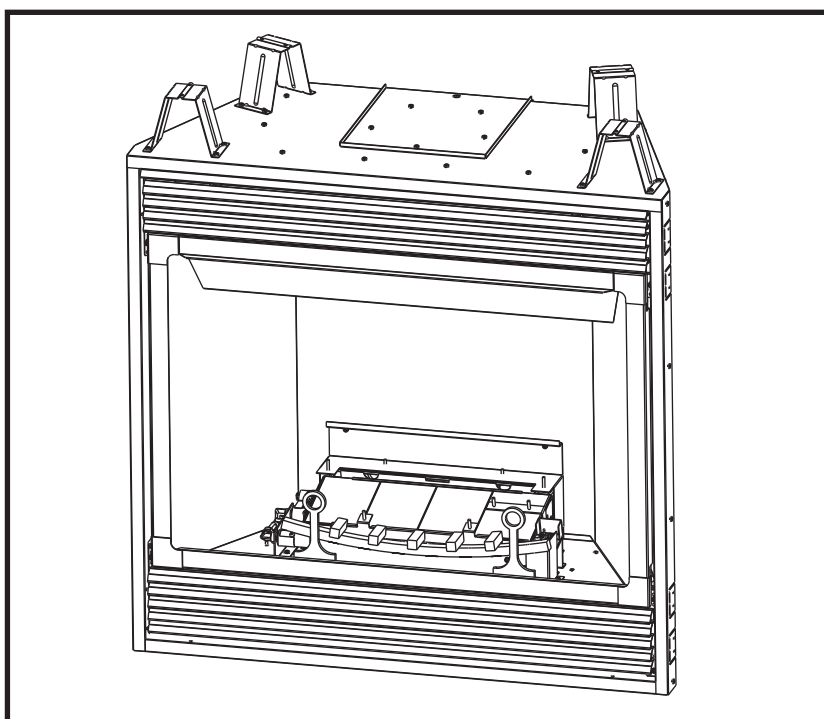
WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electric switch;
do not use any phone in your
building.
- Immediately call your gas
supplier from your neighbor's
phone. Follow the gas suppliers
instructions.
- If you cannot reach your gas
supplier call the fire department.

**DO NOT STORE OR USE
GASOLINE OR OTHER
FLAMMABLE VAPORS AND
LIQUIDS IN THE VICINITY OF
THIS OR ANY OTHER
APPLIANCE.**



Direct Vent Models: 33XDV, 36XDV, 39XDV



Installation Instructions and Homeowner's Manual



**INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.**

Table of Contents

**PLEASE READ THE INSTALLATION & OPERATING INSTRUCTIONS
BEFORE USING APPLIANCE.**

Thank you and congratulations on your purchase of a CFM Corporation fireplace.

IMPORTANT: Read all instructions and warnings carefully before starting installation.

Failure to follow these instructions fully may result in a possible fire hazard and will void the warranty.

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Installation & Operating Instructions

This gas appliance should be installed by a qualified installer, preferably NFI or WETT (Canada) certified, in accordance with local building codes and with current CSA-B149.1 Installation codes for Gas Burning Appliances and Equipment. For USA Installations follow local codes and/or the current National Fuel Gas Code. ANSI Z223.1/NFPA 54.

In the Commonwealth of Massachusetts, all gas fitting and installation of this heater shall only be done by a licensed gas fitter or licensed plumber.

FOR SAFE INSTALLATION AND OPERATION PLEASE NOTE THE FOLLOWING:

1. This fireplace gives off high temperatures and should be located out of high traffic areas and away from furniture and draperies.
2. Children and adults should be alerted to the hazards of high surface temperatures of this fireplace and should stay away to avoid burns or ignition of clothing.
3. **CAUTION: Due to high glass surface temperature children should be carefully supervised when in the same room as fireplace.**



4. Under no circumstances should this fireplace be modified. Parts removed for servicing should be replaced prior to operating this fireplace again.
5. Installation and any repairs to this fireplace must be performed by a qualified installer, service agency or gas supplier. A professional service person should be contacted to inspect this fireplace annually. Make it a practice to have all of your gas fireplaces checked annually. More frequent cleaning may be required due to excess lint and dust from carpeting, bedding material, etc.
6. Control compartments, burners and air passages in this fireplace should be kept clean and free of dust and lint. Make sure the gas valve and pilot light are turned off before you attempt to clean this fireplace.
7. The venting system (chimney) of this fireplace should be checked at least once a year and if needed your venting system should be cleaned.
8. Keep the area around your fireplace clear of combustible materials, gasoline and other flammable vapor and liquids. This fireplace should not be used as a drying rack for clothing, nor should Christmas stockings or decorations be hung on or around the fireplace.
9. Under no circumstances should any solid fuels (wood, coal, paper or cardboard etc.) be used in this fireplace.
10. The flow of combustion and ventilation air must not be obstructed in any way.

11. When fireplace is installed directly on carpeting, vinyl tile or any combustible material other than wood, the fireplace must be installed on a metal or wood panel extending the full width and depth of the fireplace.
12. This fireplace requires adequate ventilation and combustion air to operate properly.
13. This fireplace must not be connected to a chimney flue serving a separate solid fuel burning fireplace.
14. When the fireplace is not in use it is recommended that the gas valve be left in the **OFF** position.

WARNING: Check with your electronics manufacturer before installing a television or other electronic device above this fireplace.

**33XDV / 36XDV / 39XDV
Certified To**

**ANSI Z21.88b-2008 / CSA 2.33b-2008
Vented Gas Fireplace Heaters**

Proposition 65 Warning: Fuels used in gas, wood-burning or oil fired appliances, and the products of combustion of such fuels, contain chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.
California Health & Safety Code Sec. 25249.6

This appliance may be installed in an aftermarket permanently located, manufactured home or mobile home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

IMPORTANT:

PLEASE REVIEW THE FOLLOWING CAREFULLY

Remove any plastic from trim parts before turning the fireplace ON.

It is normal for fireplaces fabricated of steel to give off some expansion and/or contraction noises during the start up or cool down cycle. Similar noises are found with your furnace heat exchanger or car engine.

It is not unusual for your gas fireplace to give off some odor the first time it is burned. This is due to the curing of the paint and any undetected oil from the manufacturing process.

Please ensure that your room is well ventilated - open all windows.

It is recommended that you burn your fireplace for at least ten (10) hours the first time you use it. If the optional fan kit has been installed, place the fan switch in the "OFF" position during this time.

Installation & Operating Instructions

Requirements for the Commonwealth of Massachusetts

All gas fitting and installation of this heater shall only be done by a licensed gas fitter or licensed plumber.

For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

Installation of Carbon Monoxide Detectors

At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors.

In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

Approved Carbon Monoxide Detectors

Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and ANSI/UL 2034 listed and IAS certified.

Signage

A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, **"GAS VENT DIRECTLY BELOW, KEEP CLEAR OF ALL OBSTRUCTIONS"**.

Inspection

The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

Exemptions

The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

- The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and
- Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

MANUFACTURER REQUIREMENTS

Gas Equipment Venting System Provided

When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

- Detailed instructions for the installation of the venting system design or the venting system components; and
- A complete parts list for the venting system design or venting system.

Gas Equipment Venting System NOT Provided

When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:

- The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and
- The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

XDV Fireplace Dimensions - Installed as Rear Vent

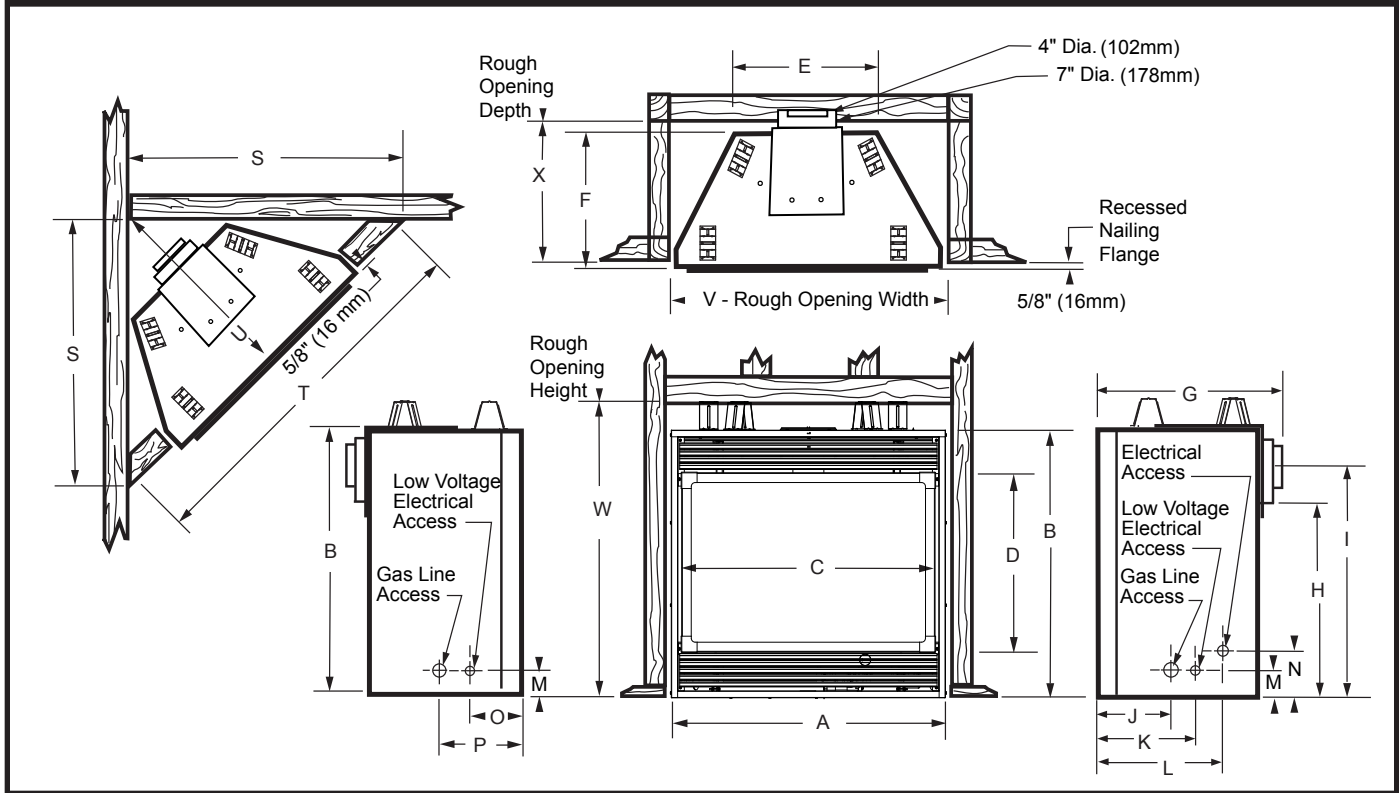


Fig. 1 Fireplace specifications and framing dimensions.

Ref.	33XDV	36XDV	39 XDV
A	33" (838 mm)	36" (914 mm)	39" (991 mm)
B	28 ⁷ / ₈ " (733 mm)	34 ¹ / ₄ " (870 mm)	34 ¹ / ₄ " (870 mm)
C	31 ¹ / ₄ " (794 mm)	34 ¹ / ₄ " (870 mm)	37 ¹ / ₄ " (946 mm)
D	18 ³ / ₈ " (466 mm)	23" (584 mm)	23" (584 mm)
E	22 ³ / ₄ " (578 mm)	24" (610 mm)	27" (686 mm)
F	14 ³ / ₈ " (365 mm)	16 ¹ / ₄ " (413 mm)	16 ¹ / ₄ " (413 mm)
G	16 ³ / ₄ " (426 mm)	18 ³ / ₄ " (476 mm)	18 ³ / ₄ " (476 mm)
H	19 ⁹ / ₁₆ " (487 mm)	24 ¹ / ₄ " (616 mm)	24 ¹ / ₄ " (616 mm)
I	22 ¹ / ₁₆ " (576 mm)	28 ¹ / ₈ " (714 mm)	28 ¹ / ₈ " (714 mm)
J	4 ⁵ / ₈ " (118 mm)	5 ⁵ / ₈ " (143 mm)	5 ⁵ / ₈ " (143 mm)
K	6 ³ / ₈ " (160 mm)	8" (203 mm)	8" (203 mm)
L	8 ⁷ / ₈ " (225 mm)	11 ⁷ / ₈ " (302 mm)	11 ⁷ / ₈ " (302 mm)
M	2" (51 mm)	2" (51 mm)	2" (51 mm)
N	3 ³ / ₈ " (85 mm)	3 ¹ / ₄ " (82 mm)	3 ¹ / ₄ " (82 mm)
O	4 ⁵ / ₈ " (118 mm)	6 ³ / ₄ " (171 mm)	6 ³ / ₄ " (171 mm)
P	6 ³ / ₈ " (162 mm)	9 ¹ / ₄ " (235 mm)	9 ¹ / ₄ " (235 mm)
Framing Dimensions			
S	36" (914 mm)	41 ⁵ / ₈ " (1057 mm)	44" (1118 mm)
T	51" (1295 mm)	58 ⁷ / ₈ " (1495 mm)	62 ¹ / ₄ " (1581 mm)
U	25 ¹ / ₄ " (641 mm)	29 ⁷ / ₈ " (748 mm)	31 ¹ / ₈ " (790 mm)
V	33 ¹ / ₂ " (851 mm)	36 ¹ / ₂ " (927 mm)	39 ¹ / ₂ " (1003 mm)
W	31" (787 mm)	38 ⁵ / ₈ " (980 mm)	38 ⁵ / ₈ " (980 mm)
X	14 ⁷ / ₈ " (378 mm)	16 ³ / ₄ " (426 mm)	16 ³ / ₄ " (426 mm)

XDV Fireplace Dimensions - Installed as Top Vent

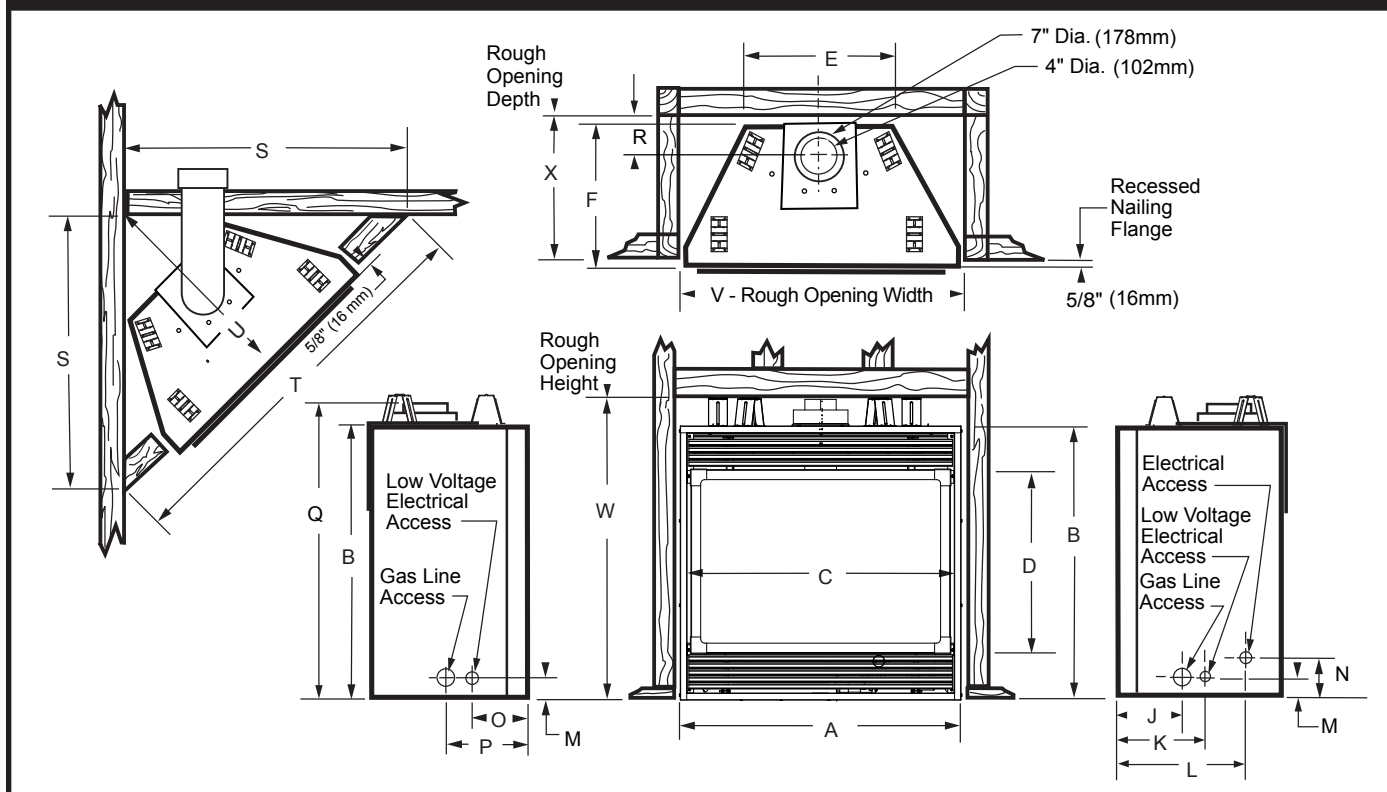


Fig. 2 Fireplace specifications and framing dimensions.

Ref.	33XDV	36XDV	39XDV
A	33" (838 mm)	36" (914 mm)	39" (991 mm)
B	28 ⁷ / ₈ " (733 mm)	34 ¹ / ₄ " (870 mm)	34 ¹ / ₄ " (870 mm)
C	31 ¹ / ₄ " (794 mm)	34 ¹ / ₄ " (870 mm)	37 ¹ / ₄ " (946 mm)
D	18 ³ / ₈ " (466 mm)	23" (584 mm)	23" (584 mm)
E	22 ³ / ₄ " (578 mm)	24" (610 mm)	27" (686 mm)
F	14 ³ / ₈ " (365 mm)	16 ¹ / ₄ " (413 mm)	16 ¹ / ₄ " (413 mm)
G	-- --	-- --	-- --
H	-- --	-- --	-- --
I	-- --	-- --	-- --
J	4 ⁵ / ₈ " (118 mm)	5 ⁵ / ₈ " (143 mm)	5 ⁵ / ₈ " (143 mm)
K	6 ³ / ₈ " (162 mm)	8" (203 mm)	8" (203 mm)
L	8 ⁷ / ₈ " (225 mm)	11 ⁷ / ₈ " (302 mm)	11 ⁷ / ₈ " (302 mm)
M	2" (51 mm)	2" (51 mm)	2" (51 mm)
N	3 ³ / ₈ " (85 mm)	3 ¹ / ₄ " (82 mm)	3 ¹ / ₄ " (82 mm)
O	4 ⁵ / ₈ " (117 mm)	6 ³ / ₄ " (171 mm)	6 ³ / ₄ " (171 mm)
P	6 ³ / ₈ " (162 mm)	9 ¹ / ₄ " (235 mm)	9 ¹ / ₄ " (235 mm)
Q	31 ³ / ₄ " (806 mm)	37" (939 mm)	37" (939 mm)
R	6 ⁵ / ₃₂ " (156 mm)	6 ³ / ₄ " (170 mm)	6 ³ / ₄ " (170 mm)
Framing Dimensions			
S	36" (914 mm)	39 ³ / ₄ " (1010 mm)	43 ¹ / ₈ " (1045 mm)
T	51" (1295 mm)	55 ¹ / ₄ " (1403 mm)	60 ⁷ / ₈ " (1546 mm)
U	25 ¹ / ₄ " (641 mm)	28 ¹ / ₈ " (714 mm)	30 ⁷ / ₈ " (784 mm)
V	33 ¹ / ₂ " (851 mm)	36 ¹ / ₂ " (927 mm)	39 ¹ / ₂ " (1003 mm)
W	31" (787 mm)	38 ⁵ / ₈ " (980 mm)	38 ⁵ / ₈ " (980 mm)
X	14 ⁷ / ₈ " (378 mm)	16 ³ / ₄ " (426 mm)	16 ³ / ₄ " (426 mm)

Locating Your Fireplace

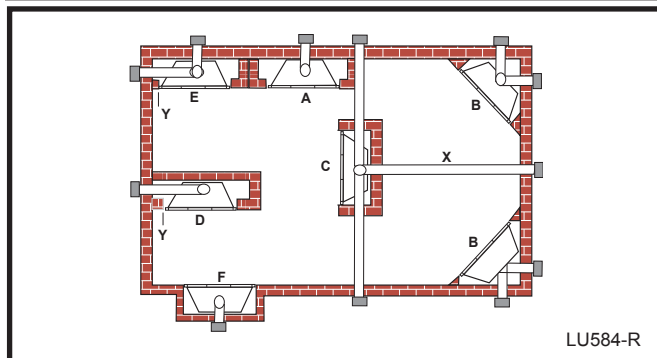


Fig. 3 Locate gas fireplace.

A) Flat on wall B) Cross corner C) **Island
D) *Room divider E) *Flat on wall corner F) Chase installation
Y) 6" minimum

NOTE: (Fig. 3)

** Island (C) and Room Divider (D) installation is possible as long as the horizontal portion of the vent system (X) does not exceed 20' (610 cm). See details in Venting Section.

* When you install your fireplace in (D) Room divider or (E) Flat on wall corner positions (Y), a minimum of 6" (153 mm) clearance must be maintained from the perpendicular wall and the front side edge of the fireplace.

Refer to (Y) in Figure 3.

Clearance to Combustibles

Top of Unit to Ceiling36" (914 mm)

Front of Unit to Combustibles36" (914 mm)

Appliance

Top of Standoff0" (0 mm)

Bottom0" (0 mm)

Side0" (0 mm)

Back0" (0 mm)

Venting

Concentric sections of DV Vent1" (25 mm)

Nonconcentric sections of DV Vent

Sides and Bottom1" (25 mm)

Top2" (51 mm)

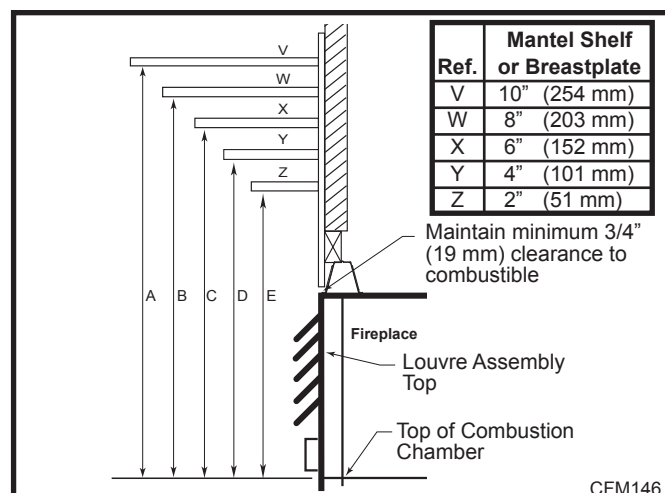
Mantels

The height that a combustible mantel is fitted above the fireplace is dependent on the depth of the mantel. This also applies to the distance between the mantel leg (if fitted) and the fireplace.

For the correct mounting height and widths refer to Figs. 4a and 4b, and the following Mantel Charts.

The fitting of a bay window trim kit does not effect the distances and reference points referred to in the diagram and chart.

Noncombustible mantels and legs may be installed at any height and width around the appliance. When using paint or lacquer to finish the mantel, such paint or lacquer must be heat resistant to prevent discoloration.



Mantel Chart

Ref.	Mantel from Top of Combustion Chamber		
	33XDV	36XDV	39XDV
A	18½" (470 mm)	19" (482 mm)	20" (508 mm)
B	16½" (419 mm)	17" (432 mm)	18" (457 mm)
C	14½" (368 mm)	15" (381 mm)	16" (406 mm)
D	12½" (318 mm)	13" (330 mm)	14" (355 mm)
E	10½" (267 mm)	11" (279 mm)	12" (305 mm)

Fig. 4a Combustible mantel minimum installation.

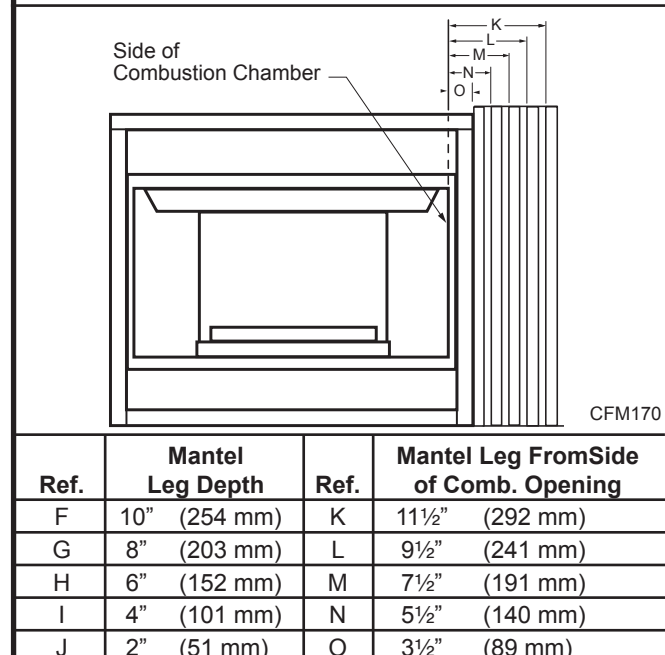
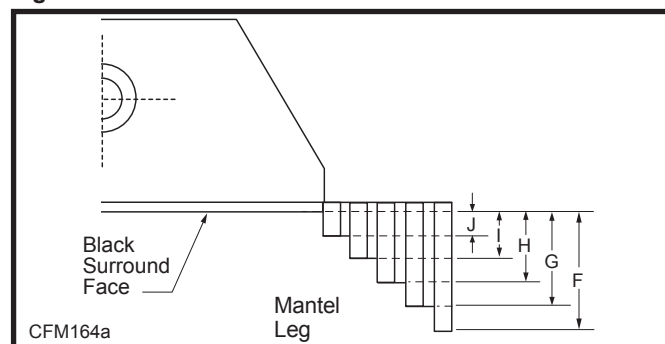


Fig. 4b Combustible mantel leg minimum installation.

Hearth

A hearth is not mandatory but is recommended for aesthetic purposes. We recommend a noncombustible hearth which projects out 12" (305 mm) or more from the front of the fireplace.

Cold climate installation recommendation:



When installing this unit against a non-insulated exterior wall or chase, it is mandatory that the outer walls be insulated to conform to applicable insulation codes.

Framing and Finishing



Check fireplace to make sure it is levelled and properly positioned.

To mount the appliance:

1. Choose the location.
2. This unit comes with four (4) flanges pre-mounted on both sides of the fireplace to allow two different drywall thicknesses to be used. Flange "A" is for 1/2" drywall while flange "B" is for 5/8" drywall.
3. Bend the desired flanges out 90° on both sides of the fireplace. Slide the fireplace into the framed opening until the flanges contact the front surfaces of the framing. Level the unit and secure it firmly in place.

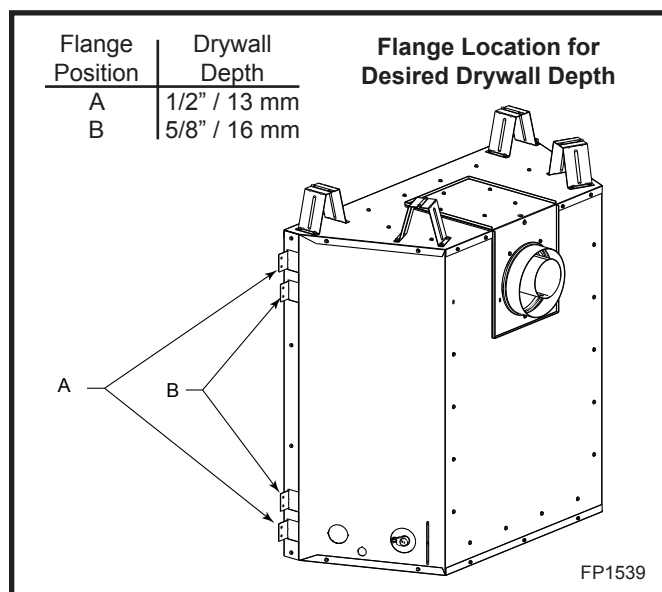


Fig. 5 Nailing flanges.

Final Finishing

Noncombustible materials such as brick or tile may be extended over the edges of the face of the fireplace.

DO NOT cover any vent or grille panels.

If a Trim Kit is going to be installed on the fireplace, the brick or tile will have to be installed flush with the edges of the fireplace.

Gas Specifications

Model	Fuel	Gas Control	Max. Input	Min. Input
			BTU/h	BTU/h
33XDVRN	Nat.	Millivolt Hi/Lo	21,500	4,400
33XDVRP	Prop.	Millivolt Hi/Lo	21,500	5,425
33XDVEN	Nat.	24 Volt Hi/Lo	21,500	4,400
33XDVEP	Prop.	24 Volt Hi/Lo	21,500	5,425
36XDVRN	Nat.	Millivolt Hi/Lo	27,500	5,150
36XDVRP	Prop.	Millivolt Hi/Lo	27,500	5,500
36XDVRFN	Nat.	Comfort Contrl	27,500	5,810
36XDVRFP	Prop.	Comfort Contrl	27,500	6,225
36XDVEN	Nat.	24 Volt Hi/Lo	27,500	5,150
36XDVEP	Prop.	24 Volt Hi/Lo	27,500	5,500
39XDVRN	Nat.	Millivolt Hi/Lo	30,000	6,700
39XDVRP	Prop.	Millivolt Hi/Lo	30,000	5,800
39XDVEN	Nat.	24 Volt Hi/Lo	30,000	6,700
39XDVEP	Prop.	24 Volt Hi/Lo	30,000	5,800

Gas Inlet and Manifold Pressures

	Natural	LP (Propane)
Inlet Minimum	5.5" w.c.	11.0" w.c.
Inlet Maximum	14.0" w.c.	14.0" w.c.
Manifold Pressure	3.5" w.c.	10.0" w.c.

High Elevations

Input ratings are shown in BTU per hour and are certified without deration for elevations up to 4,500 feet (1,370m) above sea level.

For elevations above 4,500 feet (1,370m) in USA, installations must be in accordance with the current ANSI Z223.1/NFPA 54 and/or local codes having jurisdiction.

In Canada, please consult provincial and/or local authorities having jurisdiction for installations at elevations above 4,500 feet (1,370m).

Gas Line Installation



When purging the gas lines, the front window frame assembly must be removed.

The gas pipeline can be brought in through the rear of the appliance as well as the bottom. Knockouts are provided on the bottom behind the valve to allow for the gas pipe installation and testing of any gas connection. It is most convenient to bring the gas line in from the rear right side of the valve as this allows fan installation or removal without disconnecting the gas line.

The gas line connection can be made with properly tinned 3/8" copper tubing, 3/8" rigid pipe or an approved flex connector. Since some municipalities have additional local codes, it is always best to consult your local authority and the National Fuel Gas Code, ANSI Z223.1/NFPA 54 in the USA or the CSA-B149.1 installation code.

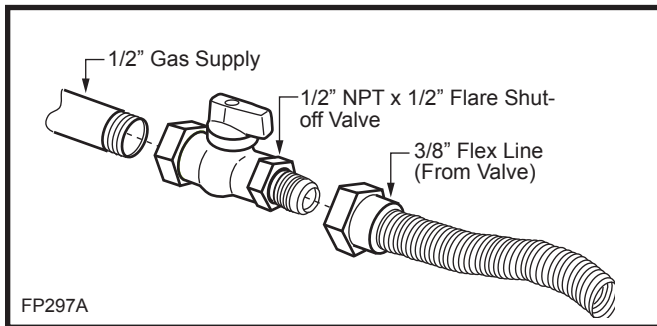


Fig. 6 Typical gas supply installation.



Always check for gas leaks with a mild soap and water solution applied with a brush no larger than 1" (25 mm). Never apply soap and water solution with a spray bottle. Do not use an open flame for leak testing.



The fireplace valve must not be subjected to any test pressures exceeding 1/2 psi. Isolate or disconnect this or any other gas appliance control from the gas line when pressure testing.

The gas control is equipped with a captured screw type pressure test point, therefore it is not necessary to provide a 1/8" test point up stream of the control.

When using copper or flex connector use only approved fittings. Always provide a union when using black iron pipe so the gas line can be easily disconnected for burner or fan servicing. See gas specification for pressure details and ratings.

The fireplace valve must not be subjected to any test pressures exceeding 1/2 psi. Isolate or disconnect this and any other gas appliance control from the gas line when pressure testing.

Remote ON/OFF Switch

Do not wire the remote ON/OFF wall switch for this gas appliance into a 120v power supply.

1. Thread wire through the electrical knockout located on either side of the unit. Take care not to cut the wire or insulation on metal edges. Ensure the wire is secured and protected from possible damage. Run one end of the gas control valve and the other end to the conveniently located wall switch.
2. Attach the wire to the ON/OFF switch and install switch into receptacle box. Attach cover plate to switch.
3. Connect wiring to gas valve. (Fig. 7)

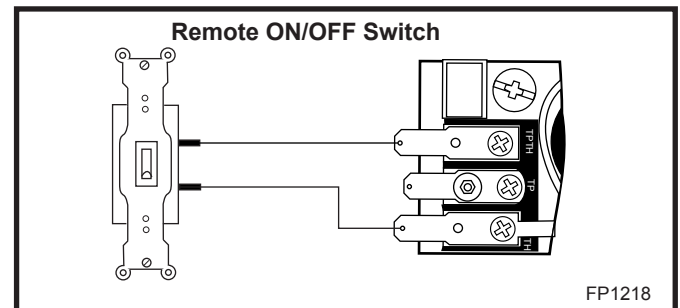


Fig. 7 Remote switch wiring diagram for R models.

Alternate Switch Location

The remote switch can be installed on the front/side of the access door. Simply mount the switch to the bracket provided and screw the bracket to either side of the frame, lining up the screws with the pre-punched holes. (Fig. 8)

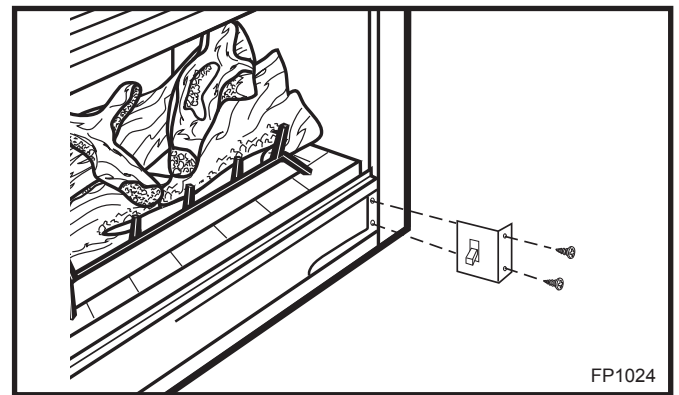


Fig. 8 Alternate switch location.

EB-1 Electrical Box



The fireplace, when installed, must be electrically connected and grounded in accordance with local codes or, in the absence of local codes, with the current CSA C22.1 Canadian Electrical Code.



For USA installations follow local codes and the national electrical code ANSI/NFPA No. 70.



It is strongly suggested that the wiring of the EB-1 Electrical Junction Box be carried out by a licensed electrician.



Ensure that the power to the supply line has been disconnected before commencing this procedure.

The EB-1 Electrical junction box has been fitted standard on this model to allow for the easy connection of an optional fan kit.

To connect the EB-1 box to the house electrical supply follow the steps below.

1. Unscrew the retaining screw from the EB-1 base plate and remove the EB-1 assembly from the appliance. (Fig. 9)
2. Remove the front cover of the EB-1 box.
3. Remove the plug socket assembly from the EB-1 box.
4. Feed the supply line in through the EB-1 opening in the side of the appliance and then through the back of the EB-1 assembly. (Fig. 9)

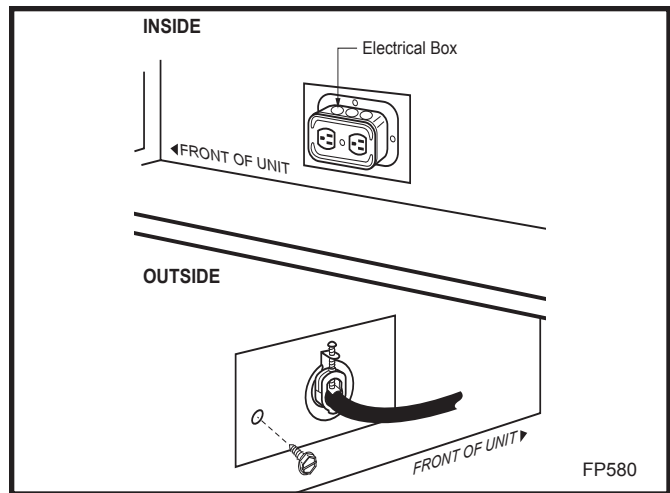


Fig. 9 EB-1 receptacle.

5. Connect the black wire of the power supply line to the brass screw (polarized) of the socket assembly.
6. Connect the white wire of the power line to the chrome screw of the socket assembly.
7. Connect the ground wire of the supply line to the green screw of the socket assembly.
8. Refit the socket assembly back into the electrical box and replace the cover plate. Secure the cable with the clamp on the outside of the EB-1 base plate and refit the EB-1 assembly to the unit with the screw removed in step 1.

Electronic Gas Control Valve

This appliance may be fitted with a Synetek ignition module.

Installation of the remote on/off starter switch or wall thermostat on electronic ignition units.

1. Thread the wiring through the holes on the side panels of the appliance. Take care not to cut the wire or insulation on metal edges. Route the wire to a conveniently located receptacle box.
2. Attach the wire to the ON/OFF switch and install the switch into the receptacle box.
3. Connect the white wire from the wall switch or wall thermostat to the white wire terminal from the electronic module. Connect the black wire from the wall switch or the red wire from the wall thermostat, to the red wire terminal from the electronic module.

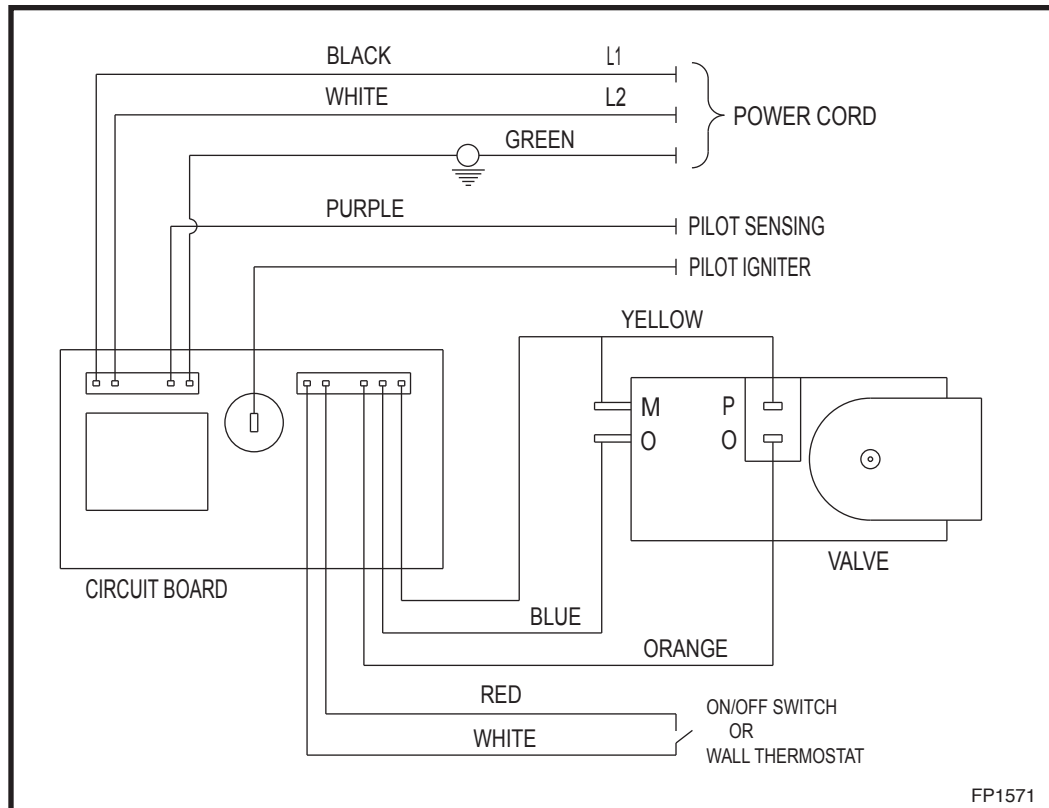


Fig. 10 SIT822 Valve with Synetek electronic control wiring diagram.

Optional Top Vent Application

The 33/36/39XDV fireplaces are shipped as rear vent units. If the layout requires a top vent, convert the unit following the steps below.

1. Remove the 10 screws securing outer collar adapter to fireplace. (Fig. 11)
2. Set outer collar adapter aside.
3. Carefully remove and discard the insulation directly below the 7" hole in the cabinet top. The insulation is perforated around the hole to aid in its removal. Remove the four (4) screws securing flue cover to top of unit and remove flue cover. (Fig. 12)
4. Remove the four (4) screws securing the flue pipe assembly to the appliance. Remove flue pipe. (Fig. 12)
5. Secure flue cover to back of flue outlet. (Fig. 13)
6. Install flue pipe and gasket removed in step 4 to top of unit with four (4) screws. (Fig. 13)
7. Secure outer collar adapter to unit with the round collar on top, secure with 10 screws. (Fig. 14)

NOTE: Be sure not to damage any gasket material.

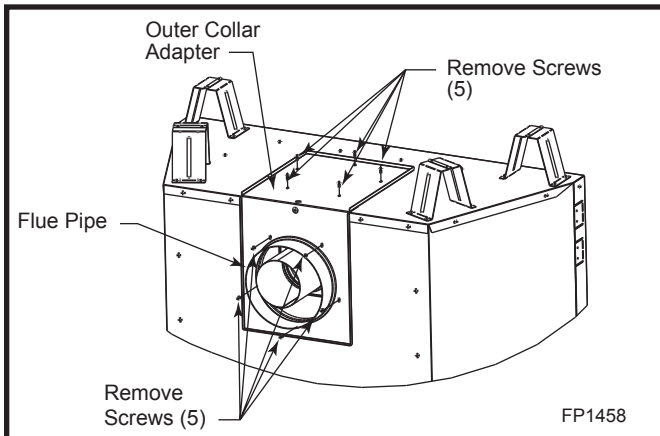


Fig. 11 Remove screws from outer collar adapter.

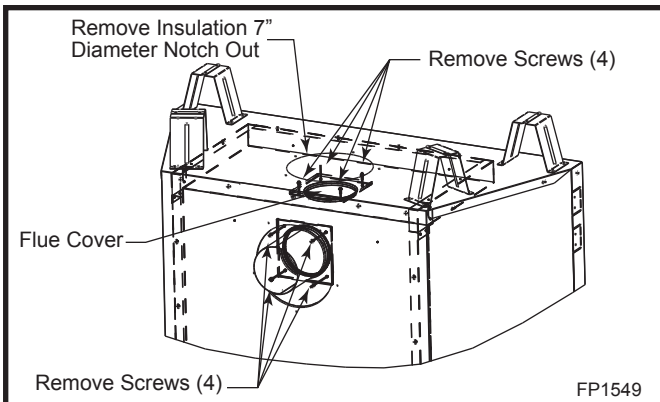


Fig. 12 Remove flue cover and flue pipe.

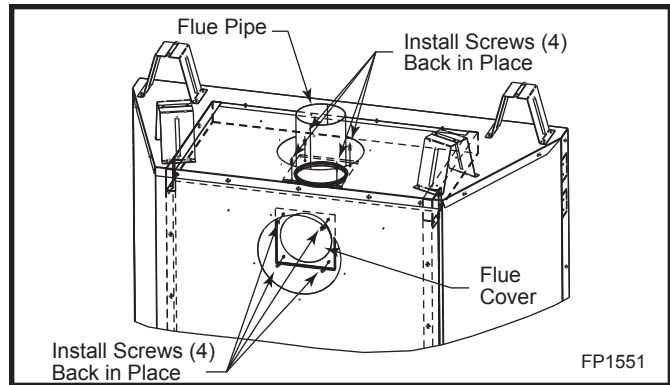


Fig. 13 Replace flue cover and flue pipe.

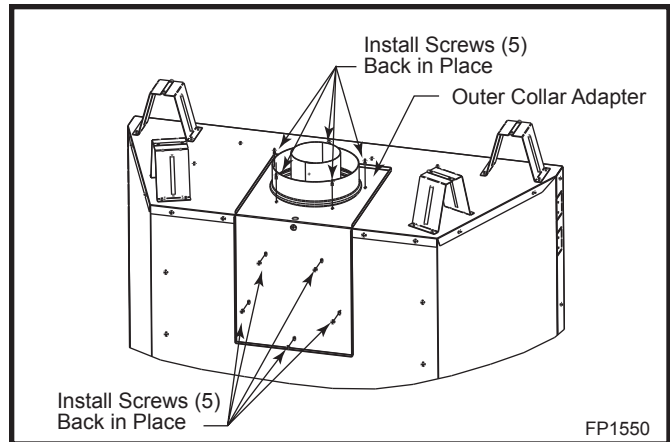


Fig. 14 Completed conversion.



After conversion to top vent configuration, the 4" (102 mm) flue pipe should be concentric within the 7" (175 mm) outer collar.

Top Vent Application Restrictor Plate

When the 33XDV or 36XDV models are installed as top vent fireplaces with a minimum 12" (305 mm) rise, the restrictor plate must be installed to give better flame appearance.

This restrictor plate is shipped with the 33/36XDV and is located below the access control panel.

33XDV Restrictor Plate Installation

1. Remove rear log bracket located behind the burner panel.
2. Install the restrictor plate with the rear log using existing mounting holes and pre-attached screws from the rear log bracket. (Fig. 15)
3. Install rear log bracket assembly by reversing Step 1.
4. Install log set, ember materials, lava rock. Refer to log set installation section.

36XDV Restrictor Plate Installation

1. Remove rear log bracket located behind the burner panel.
2. Replace the deflector rear log bracket with the restrictor plate to the rear log bracket using existing mounting holes and screws. (Fig. 16) Discard deflector.
3. Install rear log bracket assembly by reversing Step 1.
4. Install log set, ember materials, lava rock. Refer to log set installation section.

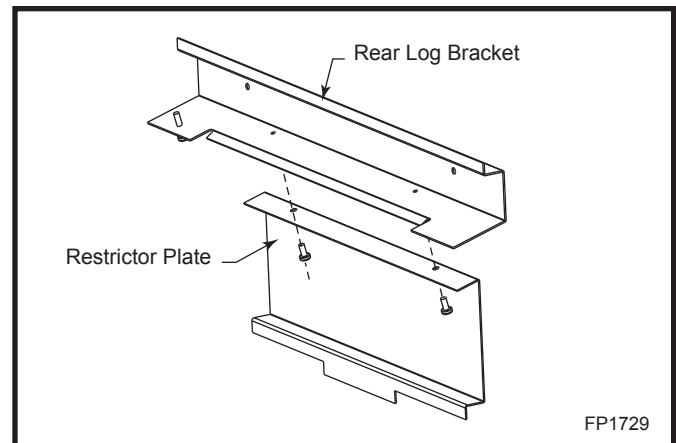


Fig. 15 33XDV restrictor plate installation.

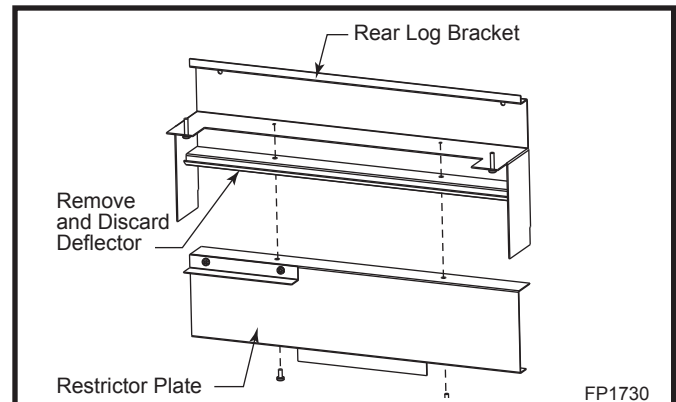


Fig. 16 36XDV restrictor plate installation.

General Venting

Your fireplace is approved to be vented either through the side wall, or vertically through the roof.

- Only CFM Corporation venting components specifically approved and labelled for this fireplace may be used.
- If vent termination is installed in an accessible location, Vent Termination Guard #53525 shall be installed.
- Vent terminations shall not be recessed into a wall or siding.
- Horizontal venting which incorporates the twist lock pipe must be installed on a level plane without an inclining or declining slope.
- Horizontal venting which incorporates the use of flex venting shall have an inclining slope from the unit of 1/2" (13 mm) per 12" (305 mm).

There must not be any obstruction such as bushes, garden sheds, fences, decks or utility buildings within 24" (610 mm) from the front of the termination hood.

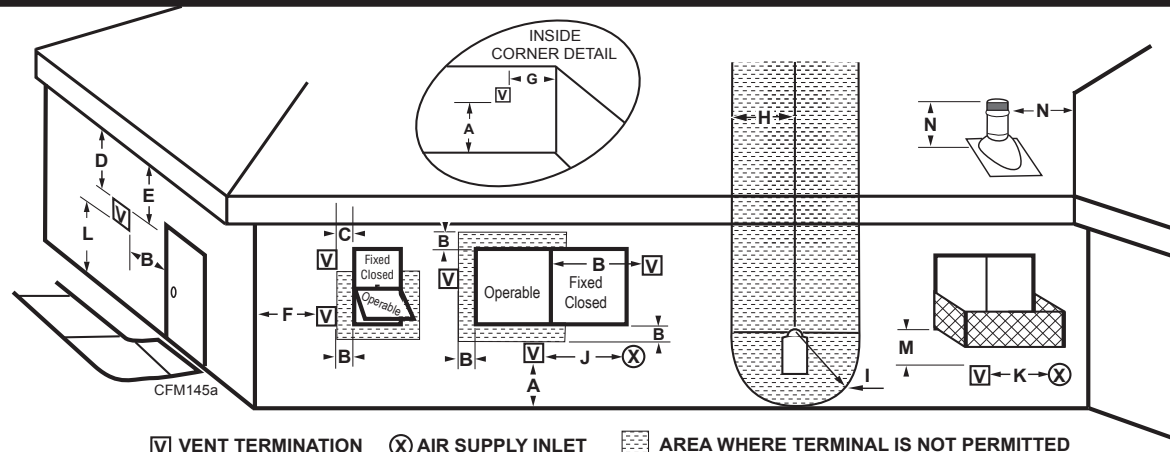
Do not locate termination hood where excessive snow or ice build up may occur. Be sure to check vent termination area after snow falls, and clear to prevent accidental blockage of venting system. When using snow blowers, make sure snow is not directed towards vent termination area.

Location of Vent Termination

It is imperative the vent termination be located observing the minimum clearances as shown on the next page.

*Check with local codes or in absence of same with CSA B149.1 Installation Codes (1991) for Canada or follow the current National Fuel Gas Code, ANSI Z223.1/NFPA 54 for installations in the USA.

General Venting Information - Termination Location



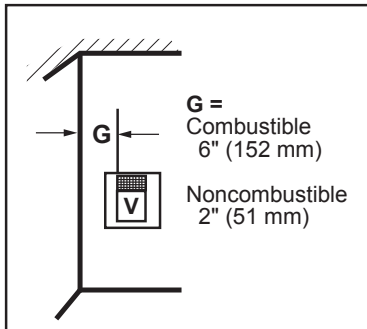
	Canadian Installations ¹	US Installations ²
A = Clearance above grade, veranda, porch, deck, or balcony	12" (30cm)	12" (30cm)
B = Clearance to window or door that may be opened	6" (15cm) for appliances < 10,000 Btuh (3kW), 12" (30cm) for appliances > 10,000 Btuh (3kW) and < 100,000 Btuh (30kW), 36" (91cm) for appliances > 100,000 Btuh (30kW)	6" (15cm) for appliances < 10,000 Btuh (3kW), 9" (23cm) for appliances > 10,000 Btuh (3kW) and < 50,000 Btuh (15kW), 12" (30cm) for appliances > 50,000 Btuh (15kW)
C = Clearance to permanently closed window	12" (305mm) recommended to prevent window condensation	12" (305mm) recommended to prevent window condensation
D = Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2' (610mm) from the center line of the terminal	18" (458mm)	18" (458mm)
E = Clearance to unventilated soffit	12" (305mm)	12" (305mm)
F = Clearance to outside corner	see next page	see next page
G = Clearance to inside corner (see next page)	see next page	see next page
H = Clearance to each inside of center line extended above meter/regulator assembly	3' (91cm) within a height of 15' (5m) above the meter/regulator assembly	3' (91cm) within a height of 15' (5m) above the meter/regulator assy
I = Clearance to service regulator vent outlet	3' (91cm)	3' (91cm)
J = Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliances	6" (15cm) for appliances < 10,000 Btuh (3kW), 12" (30cm) for appliances > 10,000 Btuh (3kW) and < 100,000 Btuh (30kW), 36" (91cm) for appliances > 100,000 Btuh (30kW)	6" (15cm) for appliances < 10,000 Btuh (3kW), 9" (23cm) for appliances > 10,000 Btuh (3kW) and < 50,000 Btuh (15kW), 12" (30cm) for appliances > 50,000 Btuh (15kW)
K = Clearance to a mechanical air supply inlet	6' (1.83m)	3' (91cm) above if within 10 feet (3m) horizontally
L = Clearance above paved sidewalk or paved driveway located on public property	7' (2.13m)†	7' (2.13m)†
M = Clearance under veranda, porch, deck or balcony	12" (30cm)‡	12" (30cm)‡
N = Clearance above a roof shall extend a minimum of 24" (610mm) above the highest point when it passes through the roof surface, and any other obstruction within a horizontal distance of 18" (450mm).		
<p>1 In accordance with the current CSA-B149 Installation Codes</p> <p>2 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Codes</p> <p>† A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings</p> <p>‡ only permitted if veranda, porch, deck or balcony is fully open on a minimum 2 sides beneath the floor:</p> <p>NOTE: 1. Local codes or regulations may require different clearances.</p> <p>2. The special venting system used on Direct Vent Fireplaces are certified as part of the appliance, with clearances tested and approved by the listing agency.</p> <p>3. CFM Corporation assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.</p>		

Fig. 17 Vent termination locations.

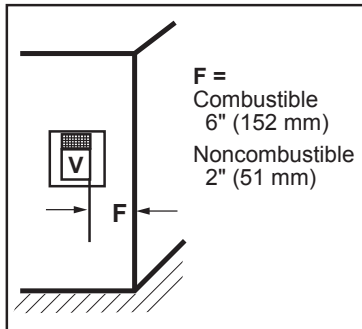
Termination Clearances

Termination clearances for buildings with combustible and noncombustible exteriors.

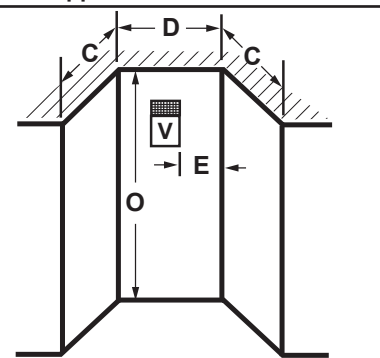
Inside Corner



Outside Corner

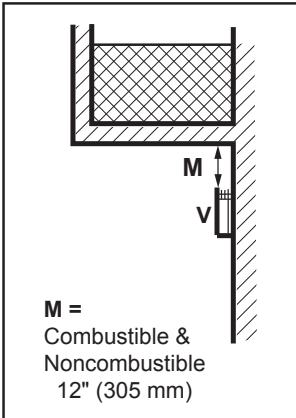


Alcove Applications*

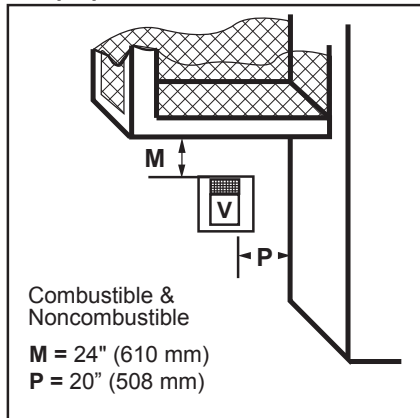


E = Min. 6" (152 mm) for non-vinyl sidewalls
Min. 12" (305 mm) for vinyl sidewalls
O = 8' (2.4 m) Min.

Balcony - with no side wall



Balcony - with perpendicular side wall



No. of Caps	D _{Min.}	C _{Max.}
1	3' (.9 m)	2 x D _{Actual}
2	6' (1.8 m)	1 x D _{Actual}
3	9' (2.7 m)	2/3 x D _{Actual}
4	12' (3.7 m)	1/2 x D _{Actual}

D_{Min.} = # of Termination caps x 3
C_{Max.} = (2 / # termination caps) x D_{Actual}

584-15

***NOTE:** Termination in an alcove space (spaces open only on one side and with an overhang) is permitted with the dimensions specified for vinyl or non-vinyl siding and soffits. 1. There must be a 3' (914 mm) minimum between termination caps. 2. All mechanical air intakes within 10' (1 m) of a termination cap must be a minimum of 3' (914 mm) below the termination cap. 3. All gravity air intakes within 3' (914 mm) of a termination cap must be a minimum of 1' (305 mm) below the termination cap.

Fig. 17a Termination clearances.

General Information Assembling Vent Pipes

Canadian Installations:

Venting system must be installed in accordance with the current CSA-B149.1 installation code.

USA Installations:

The venting system must conform with local codes and/or the current National Fuel Gas code ANSI Z223.1/ NFPA 54.

Only venting components manufactured by CFM Corporation can be used in Direct Vent systems.

Flex Vent Pipes

Before joining the flex vent pipe to the unit, apply a bead of high temperature sealant* (provided) to the 4" pipe exiting the fireplace. Secure flex vent pipe in place with a hose clamp (provided).

*Be sure the flex pipe overlaps at least 1" (25 mm) onto the collars of the fireplace and termination. If the termination has an internal bead, be sure to overlap and secure 1" (25 mm) past the bead.

* Be sure the flex vent is flat and flush with the flue or outer collar before proceeding. Apply a tug to be sure the vent will not slip off the collars.

Repeat process with 7" flex vent pipe. The same procedure must be performed on the vent side.

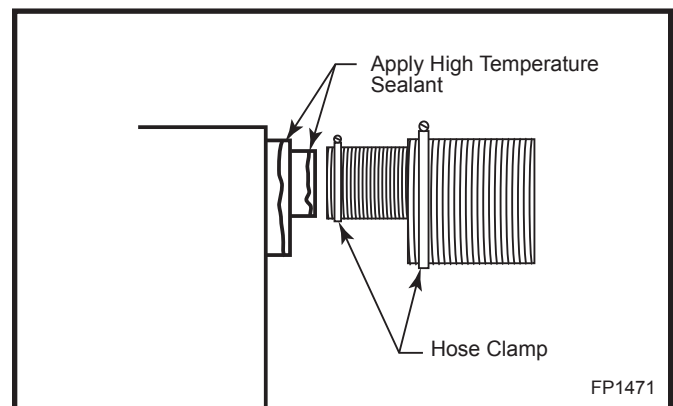


Fig. 18 Apply high temperature sealant to 4" and 7" pipes.

Twist Lock Pipes

When using CFM Corporation twist-lock pipe it is not necessary to use sealant on the joints. The only areas of the venting system that need to be sealed with high temperature silicone sealant are the sliding joints of any telescopic vent section used in the system.

To join the twist lock pipes together, simply align the beads of the male end with the grooves of the female end, then while bringing the pipe together, twist the pipe until the flange on the female end contacts the external flange on the male end. It is recommended that you secure the joints with three (3) sheet metal screws, however this is not mandatory with twist lock pipe.

To make it easier to assemble the joints we suggest putting a lubricant (Vaseline or similar) on the male end of the twist lock pipe prior to assembly.

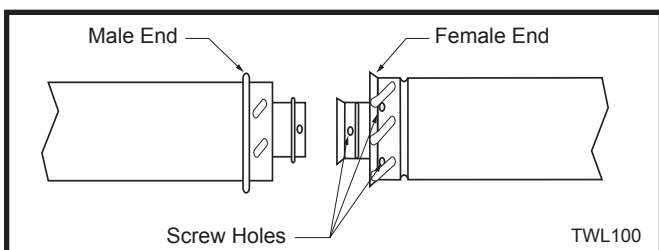


Fig. 19 Twist-lock pipe joints.

How to Use the Vent Graph

The vent chart should be read in conjunction with the following vent installation instructions to determine the relationship of the vertical and horizontal dimensions of the vent system.

1. Determine the height of the center of the horizontal vent pipe exiting through the outer wall. Using this dimension on the Sidewall Vent Graph (Fig. 20) locate the point intersecting with slanted graph line.
2. From the point of this intersection, draw a vertical line to the bottom of the graph.
3. Select the indicated dimension, and position the fireplace in accordance with same.

Example A:

If the vertical dimension from the floor of the fireplace is 11' (3.4 m) the horizontal run to the face of the outer wall must not exceed 14' (4.3 m).

Example B:

If the vertical dimension from the floor of the unit is 7' (2.14 m), the horizontal run to the face of the outer wall must not exceed 8½' (2.6 m).

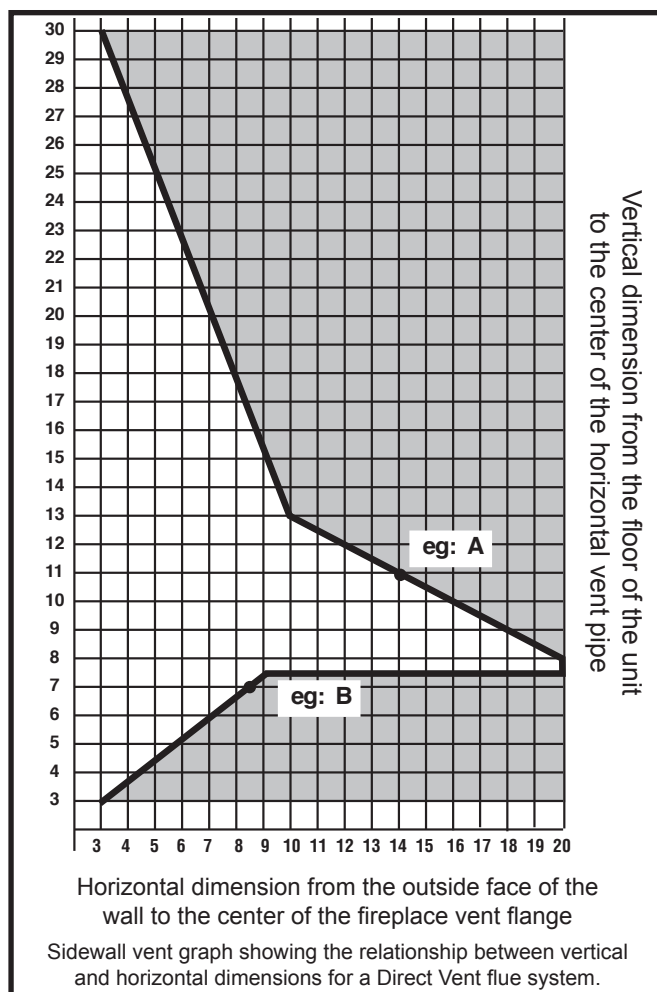


Fig. 20 Sidewall venting graph. (Dimensions in feet)

Rear Wall Venting Applications

When installed as a rear vent unit this appliance may be vented directly to a termination located on the rear wall behind the appliance.

- Only CFM Corporation venting components are approved to be used in these applications. (Refer to "Venting Components" listed for different installation requirements)
- The maximum horizontal distance between the rear of the appliance (or end of the transition elbow in a corner application) and the outside face of the rear wall is 20" (508 mm). (Fig. 21)
- Only one 45° elbow is allowed in these installations.
- Minimum clearances between vent pipe and combustible materials are as follows:

Top - 2" (51 mm)
Sides - 1" (25 mm)
Bottom - 1" (25 mm)

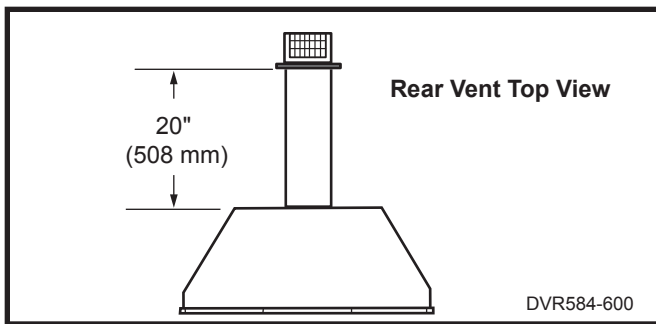


Fig. 21 Rear vent application, no elbows.

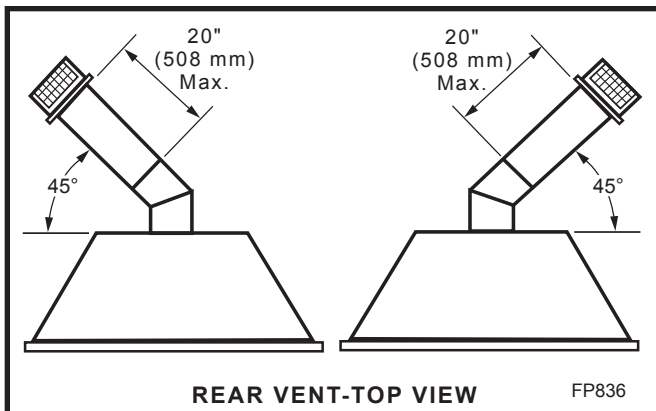


Fig. 22 Rear vent application, one 45° elbow.

Rear Wall Installation Twist Lock Pipe

STEP 1

Locate vent opening on the wall. To locate hole center consult with appropriate fireplace dimensions, Page 4. Frame as shown below.

NOTE: When using flex vent, the opening will have to be measured according to the 1/2" (13 mm) rise in 12" (305 mm) vertical run.

Combustible Walls (Fig. 23): Cut a 10 3/8"H x 9 3/8" W (264 x 240 mm) hole through the exterior wall and frame as shown.

Noncombustible Walls (Fig. 23): Hole opening must be 7 1/2" (190 mm) in diameter.



Zero clearance sleeve is only required for combustible walls.

STEP 2

Measure wall thickness and cut zero clearance sleeve parts to proper length (MAXIMUM 12"/305 mm). Assemble sleeve and attach to firestop with #8 sheet metal screws (supplied). (Fig. 24)

STEP 3

Measure the horizontal length requirement for the venting including a 2" (51 mm) overlap, i.e. from the elbow to the outside wall face plus 2" (51 mm). (Fig. 22)

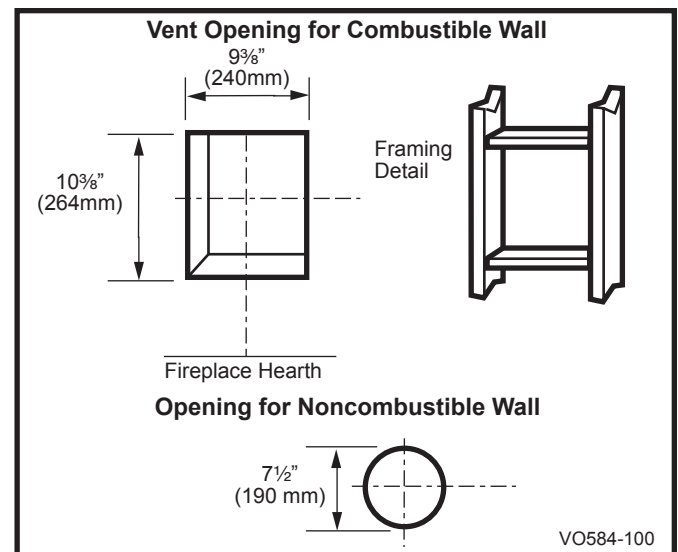


Fig. 23 Locate vent opening on wall.

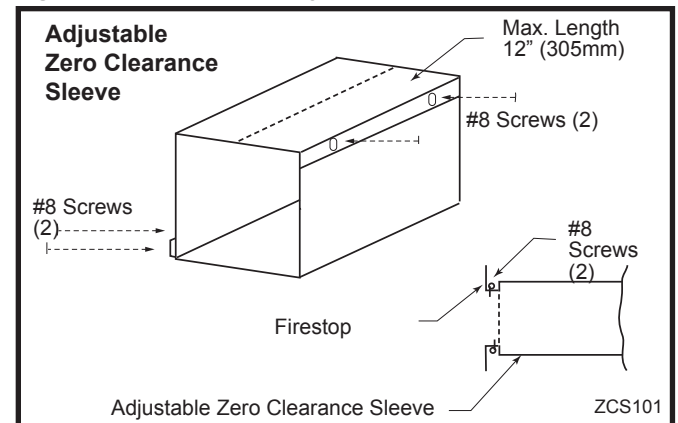


Fig. 24 Adjustable zero clearance sleeve.

STEP 4

Install the 4" (102 mm) vent to the appliance collar and secure with three (3) sheet metal screws. Install the 7" (178 mm) vent pipe to the appliance collar and secure with three (3) sheet metal screws. It is not necessary to seal this connection. If a 45° elbow is being used, attach the elbow to the appliance in the same manner then attach the venting to the elbow.



It is critical there is no downward slope away from the appliance when connecting the vent or elbow.

STEP 5

Guide the venting through the vent hole as you place the appliance in its installed position. Guide the 4" (102 mm) and 7" (178 mm) collar of the vent termination into the outer ends of the venting. Do not force the termination. If the vent pipes do not align with the termination, remove and realign the venting at the appliance flue collars. (Fig. 25) Attach the termination to the wall as outlined in the instruction sheet supplied with the termination.

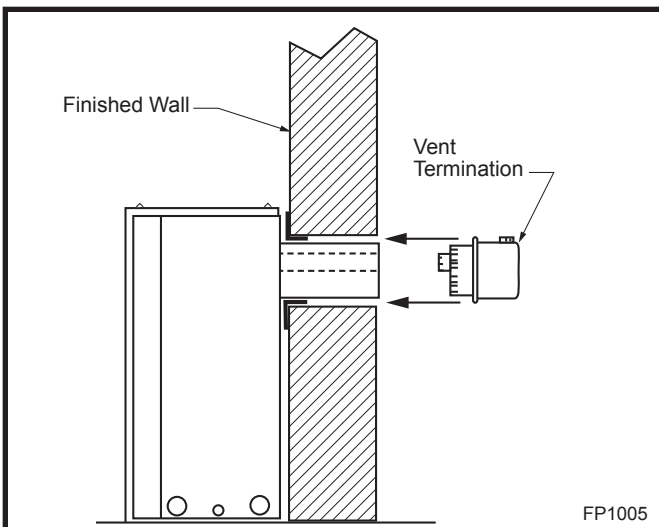


Fig. 25 Side view of final unit location.

Rear Wall Vent Installations - Flex Vent Pipe

Follow Steps 1 and 2 on Page 15.

Step 3

Install the 4" (102 mm) flex vent pipe to the appliance collars described in "General Information Assembling Vent Pipes", Page 11. If the installation requires a 45° angle, grasp the vent pipe close to the appliance collar and bend to 45°. DO NOT exceed 45°. (Fig. 26)

Install the 7" vent pipe in the same manner as Step 2.

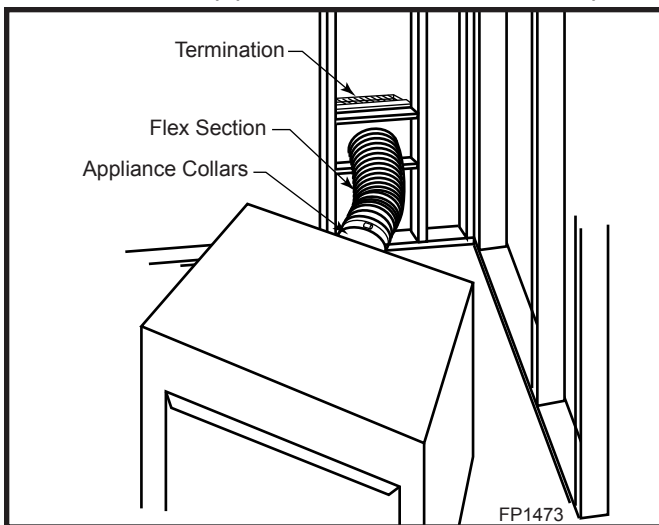


Fig. 26 Grasp the vent pipe close to the collar and bend to 45° angle. Do not exceed 45°.

NOTE: There must be a 1/2" (13 mm) rise in a 12" (305 mm) length of flex vent.

Step 4

Assemble the flex vent to the collars on the termination as you did on the appliance.

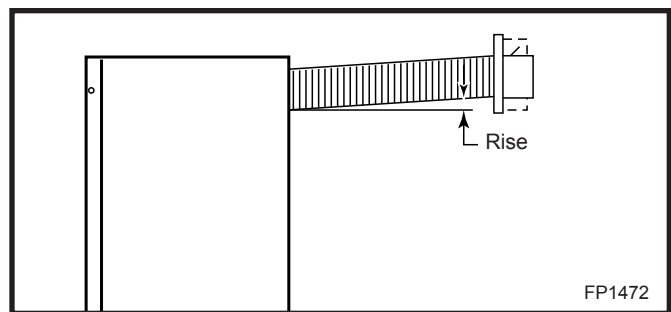


Fig. 27 There must be a 1/2" rise per foot length.

Vertical Sidewall Applications

Since it is very important that the venting system maintain its balance between the combustion air intake and the flue gas exhaust, certain limitations as to vent configurations apply and must be strictly adhered to.

The Vent Graph shows the relationship between vertical and horizontal side wall venting and will help to determine the various dimensions allowable.

Minimum clearance between vent pipes and combustible materials is 1" (25 mm) on top, bottom and sides unless otherwise noted.

When vent termination exits through foundations less than 20" below siding outcrop, the vent pipe must flush up with the siding. It is always best to locate the fireplace in such a way that minimizes the number of offsets and horizontal vent length.

The horizontal vent run refers to the total length of vent pipe from the flue collar of the fireplace to the face of the outer wall.

Horizontal plane means no vertical rise exists on this portion of the vent assembly.



When installing the appliance as a rear vent unit, the 90° or 45° transition elbow attached directly to the rear of the unit is NOT INCLUDED in the following criteria and calculations, and unless specifically mentioned should be ignored when calculating venting layouts.

- The maximum number of 90° elbows per side wall installation is three (3). (Fig. 28)
- If a 90° elbow is fitted directly on top of the fireplace flange, the maximum horizontal vent run before the termination or a vertical rise is 36" (914 mm). (Fig. 29)

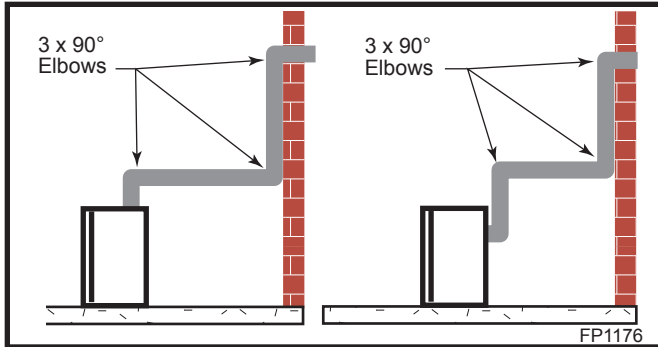


Fig. 28 Maximum three (3) 90° elbows per installation.

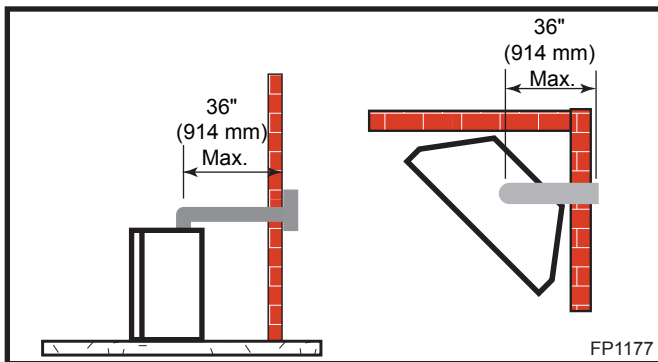


Fig. 29 Maximum horizontal run with no rise.

- If a 90° elbow is used in the horizontal vent run (level height maintained) the maximum horizontal vent length is reduced by 36" (914 mm). (Fig. 29) This does not apply if the 90° elbows are used to increase or redirect a vertical rise. (Fig. 30, 31)

Example: According to the vent graph (Page 15) the maximum horizontal vent length in a system with a 7.5' (2.3 m) vertical rise is 20' (6 m) and if a 90° elbow is required in the horizontal vent it must be reduced to 17' (5.2 m). In Figure 31 Dimension A plus B must not be greater than 17' (5.2 m).

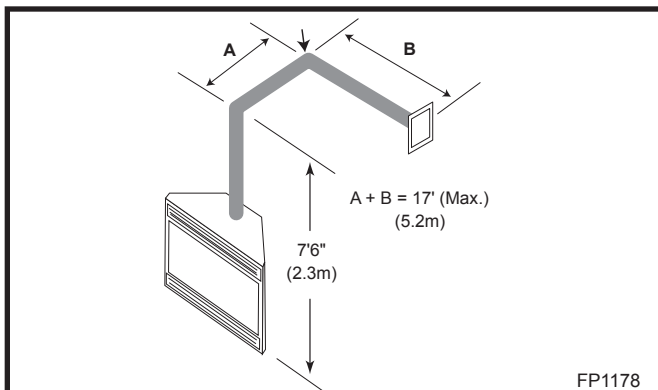


Fig. 30 Horizontal run reduction.

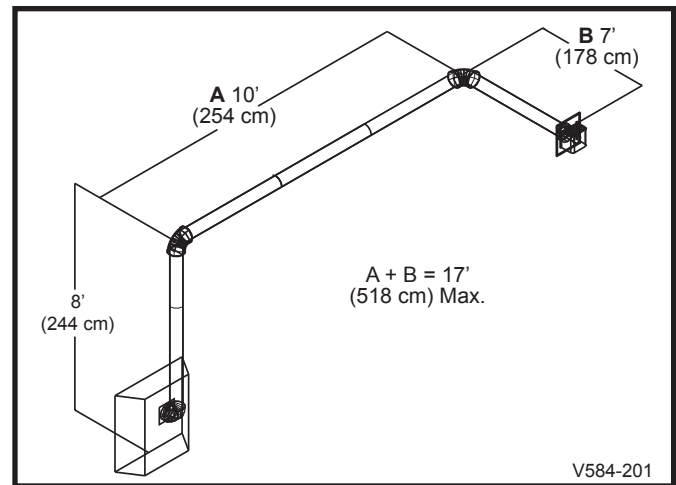


Fig. 31 Maximum vent run with elbows.

In Figure 30 & 31, dimension A plus B must not be greater than 17' (5.2 m).

- The maximum number of 45° elbows permitted per installation is six (6). These elbows can be installed in either the vertical or horizontal run.
- For each 45° elbow installed in the horizontal run, the length of the horizontal run MUST be reduced by 18" (45 cm). This does not apply if the 45° elbows are installed on the vertical part of the vent system.
- The maximum number of elbow degrees in a system is 270°. (Fig. 32)

Example:

Elbow 1 = 90°
Elbow 2 = 45°
Elbow 3 = 45°
Elbow 4 = 90°

Total angular variation = 270°

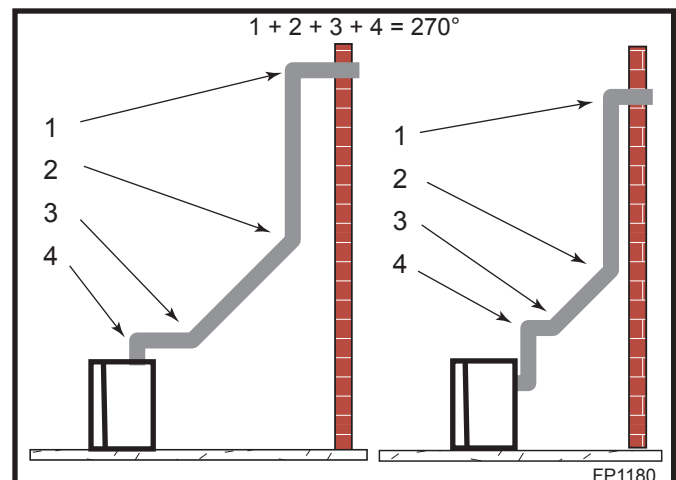


Fig. 32 Maximum elbow usage.

Vertical Sidewall Installation Twist Lock Pipe

STEP 1

Locate vent opening on the wall. It may be necessary to first position the fireplace and measure to obtain hole location. Depending on whether the wall is combustible or noncombustible, cut opening to size. (Fig. 33) (For combustible walls first frame in opening.)

NOTE: When using flex vent, the opening will have to be measured according to the 1/2" (13 mm) rise in 12" (305 mm) vent run.

Combustible Walls (Fig. 33): Cut a 9 $\frac{3}{8}$ " H x 9 $\frac{3}{8}$ " W (240 x 240 mm) hole through the exterior wall and frame.

Noncombustible Walls (Fig. 33): Hole opening must be 7.5" (190 mm) in diameter.

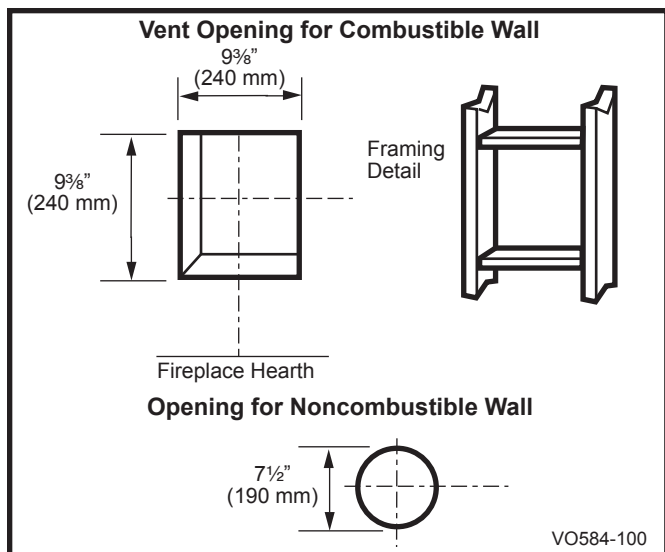


Fig. 33 Locate vent opening on wall.

STEP 2

Measure wall thickness and cut adjustable zero clearance sleeve parts to proper length (MAXIMUM 12"/305 mm). Assemble sleeve and attach to firestop with #8 sheet metal screws (supplied). Install firestop assembly. (Fig. 34)



Zero clearance sleeve is only required for combustible walls.

STEP 3

Place fireplace into position. Measure the vertical height (X) required from the base of the flue collars to the center of the wall opening. (Fig. 35)

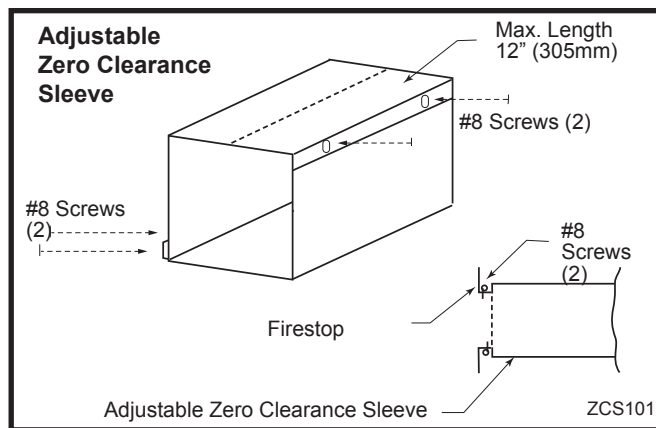


Fig. 34 Adjustable zero clearance sleeve.

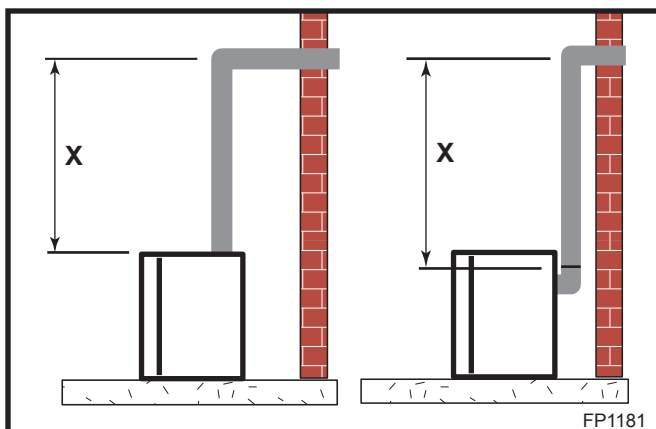


Fig. 35 Vertical height requirements.

STEP 4

Apply a band of silicone to the inner and outer flue collars of the fireplace and using appropriate length of pipe section(s) attach to fireplace with three (3) screws. Follow with the installation of the inner and outer elbow, again secure joints with three (3) sheet metal screws. Wipe off any excess silicone.

STEP 5

Measure the horizontal length requirement including a 2" (51 mm) overlap, i.e. from the elbow to the outside wall finish plus 2", or the distance required if installing a second 90° elbow. (Fig. 26)



Always install horizontal venting on a level plane.

STEP 6

Use appropriate length of pipe section - telescopic or fixed - and install. The sections which go through the wall are packaged with the starter kit, and can be cut to suit if necessary.

Sealing vent pipe and firestop gaps with high temperature sealant will restrict cold air being drawn in around fireplace.

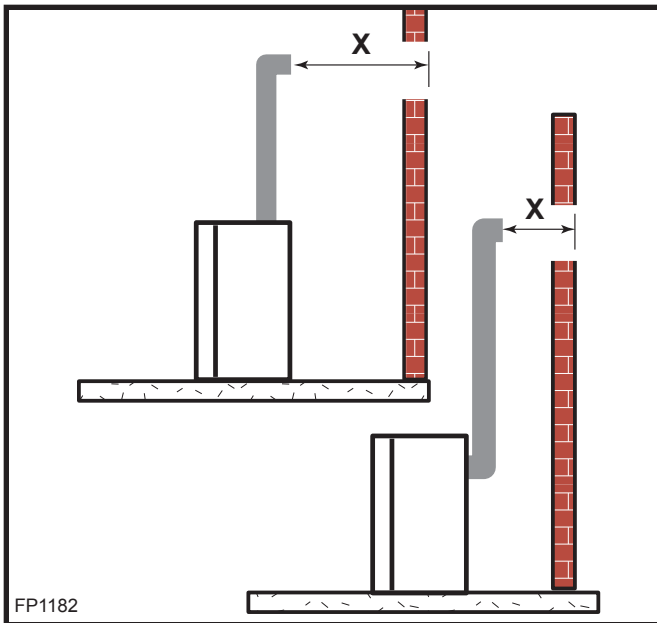


Fig. 36 Horizontal length requirement.

STEP 7

Apply high temperature sealant to 4" (102 mm) and 7" (178 mm) collars or the termination one inch away from the end. Guide the vent termination's 4" and 7" collars into their respective vent pipes. Double check that the vent pipes overlap the collars by 2" (51 mm). Secure the termination to the wall with screws provided and caulk around the wall plate to weatherproof. As an alternative to screwing the termination directly to the wall, you may also use expanding plugs or an approved exterior construction adhesive. You may also attach the termination with screws through the inner body into the 4" vent pipe, however for this method, you must extend the 4" pipe approximately 6" (152 mm) beyond the outer face of the wall.



Support horizontal pipes every 36" (914 mm) with metal pipe straps.

Vertical Sidewall Installation Flex Vent Pipe

NOTE: The 40" (1016 mm) flex vent is used for 90° off the top of the unit then out the back wall.

Follow Steps 1 and 2 on Page 18.

STEP 3

Install the four (4) spacer springs on the 4" flex vent pipe. When installing the spacer springs around the 4" pipe, stretch the spring to approximately 15" (381 mm), wrap the spring around the pipe and interlock the ends of the spacer spring approximately 2" (51 mm). Measure 6¾" (172 mm) from the end of the pipe. Place the next spring 5" (127 mm) from the previously installed

spring. Place the next spring 6" (152 mm) from the last spring. Finally, place the last spring 12" (305 mm) from the last spring installed. (Fig. 37)

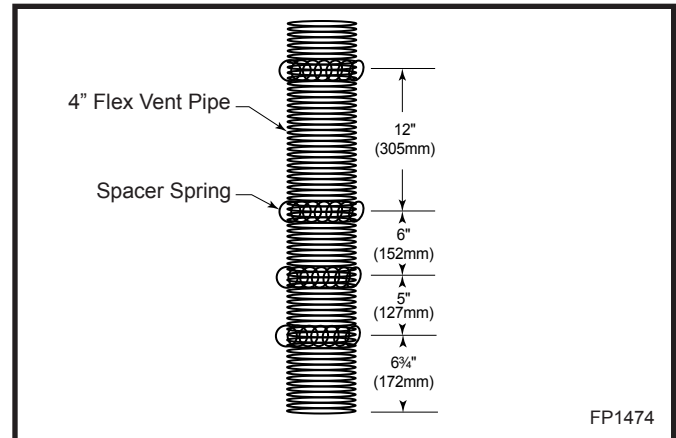


Fig. 37 Install spacer springs.

STEP 4

Install the 4" (102 mm) flex vent pipe to the appliance collar as described on Page 13. Secure the end with the first spring 6¾" (172 mm) from the flex pipe end to the unit.

STEP 5

Slide the 7" (178 mm) flex vent pipe over the 4" flex vent pipe and secure 7" collar as described on Page 14.

STEP 6

Bend the flex pipe horizontal so the bottom of the horizontal pipe measures 6½" (165 mm) from the top of the unit immediately after the 90° formation. (Fig. 38) Be sure to follow the 1/2" (13 mm) rise in a 12" (305 mm) horizontal run rule.

STEP 7

Install the 4" flex then 7" flex to the termination.

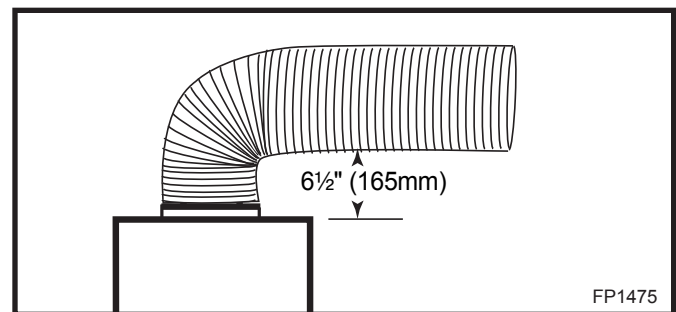


Fig. 38 Bend flex vent at 90° so horizontal portion is 6½" (165 mm) off top of unit.

Below Grade Installations

When it is not possible to meet the required vent terminal clearances of 12" (305 mm) above grade level a snorkel kit is recommended. This allows installation depth of down to 7" (178 mm) below grade level. The 7" is measured from the center of the horizontal vent pipe as it penetrates through the wall.

Ensure the sidewall venting clearances are observed. If venting system is installed below ground, we recommend a window well with adequate and proper drainage to be installed around the termination.

If installing a snorkel, a minimum 24" (610 mm) vertical rise is necessary. The maximum horizontal run with the 24" vertical pipe is 36" (914 mm). This measurement is taken from the collar of the fireplace (or transition elbow) to the face of the exterior wall. See the Sidewall Venting Graph for extended horizontal run if the vertical exceeds 24" (610 mm).

1. Establish vent hole through the wall. (Fig. 33)
2. Remove soil to a depth of approximately 16" (406 mm) below base of snorkel. Install window well (not supplied). Refill hole with 12" (305 mm) of coarse gravel leaving a clearance of approximately 4" (102 mm) below snorkel. (Fig. 39)
3. Install vent system. See Page 18, Steps 2 through 5.
4. Ensure a watertight seal is made around the vent pipe coming through the wall.
5. Apply high temperature sealant caulking (supplied) around the 4" and 7" snorkel collars.
6. Slide the snorkel into the vent pipe and secure to the wall.
7. Level the soil to maintain a 4" (102 mm) clearance below snorkel. (Fig. 39)

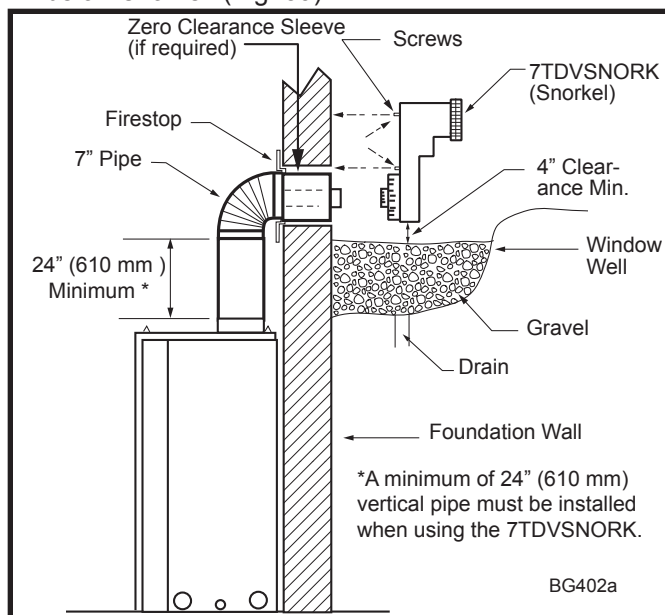


Fig. 39 Below grade installation.



Do not backfill around snorkel.

A clearance of at least 4" must be maintained between the snorkel and the soil.

If the foundation is recessed, use recess brackets (not supplied) for securing lower portion of the snorkel. Fasten brackets to wall first, then secure to snorkel with self drilling #8 x 1/2 sheet metal screws. It will be necessary to extend vent pipes out as far as the protruding wall face. (Fig. 40)

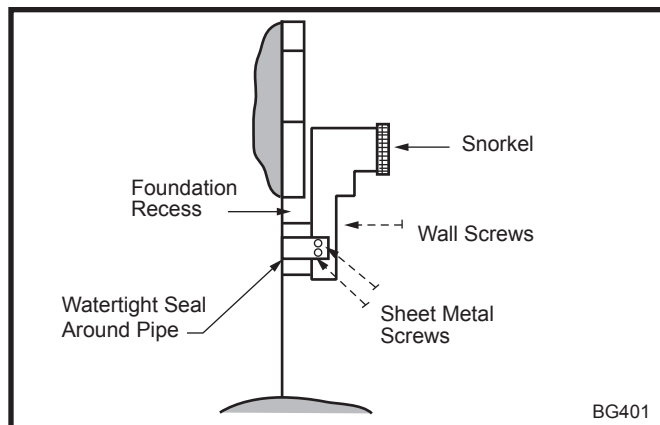


Fig. 40 Snorkel installation, recessed foundation.

Vertical Through-the-Roof Application

This gas fireplace has been approved for:

- Vertical installations up to 40' (12 m) in height. Up to a 10' (3 m) horizontal vent run can be installed within the vent system using a maximum of two 90° elbows. (Fig. 41)
- Up to two 45° elbows may be used within the horizontal run. For each 45° elbow used on the horizontal plane, the maximum horizontal length must be reduced by 18" (450 mm).

Example: Maximum horizontal length:

No elbows	=	10' (3 m)
1 x 45° elbow	=	8.5' (2.6 m)
2 x 45° elbows	=	7' (2.1 m)

- A minimum of an 8' (2.5m) vertical rise is required.
- Two sets of 45° elbow offsets may be used within the vertical sections. From 0 to a maximum of 8' (2.5 m) of vent pipe can be used between elbows. (Fig. 42)
- 7DVCS supports offsets. (Fig. 44) This application will require that you first determine the roof pitch and use the appropriate starter kit. (Refer to Venting Components List)
- The maximum angular variation allowed in the system is 270°. (Fig. 42)
- The minimum height of the vent above the highest point of penetration through the roof is 2' (610 mm). (Fig. 45) Refer to note 2, Page 15.

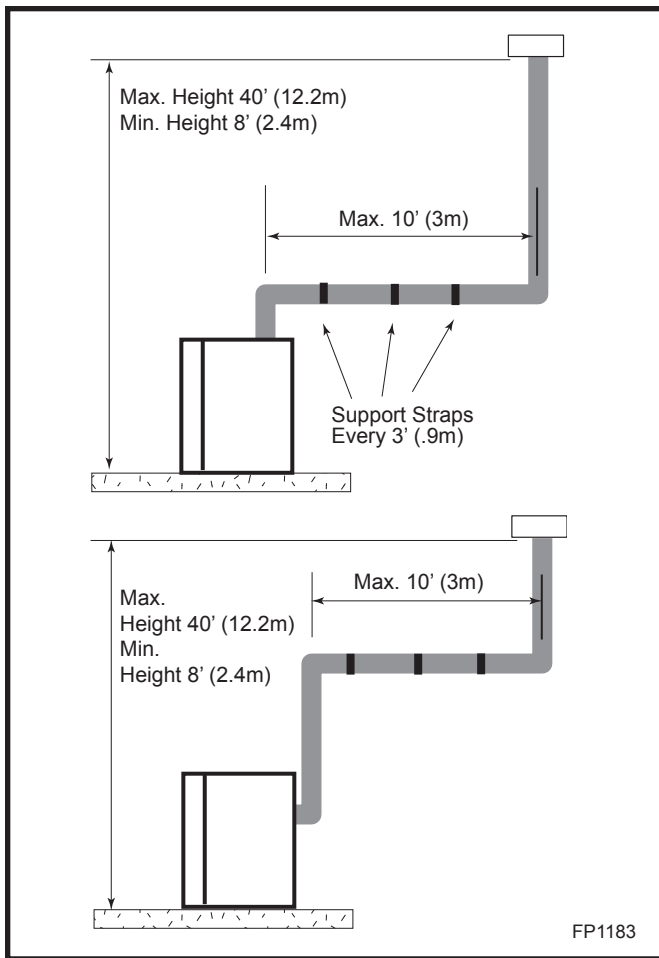


Fig. 41 Support straps for horizontal runs.

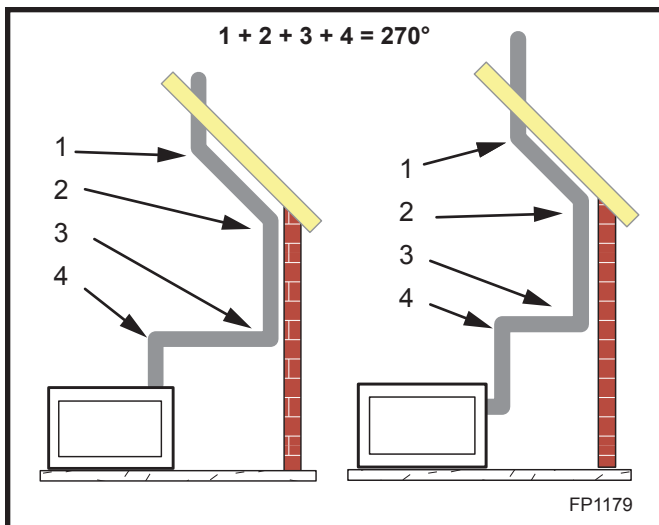


Fig. 42 Maximum elbow usage.

Vertical Through-the-Roof Installation

1. Locate your fireplace.
2. Plumb to center of the (4") flue collar from ceiling above and mark position.
3. Cut opening equal to 9 $\frac{3}{8}$ " x 9 $\frac{3}{8}$ " (240 x 240 mm).
4. Proceed to plumb for additional openings through the roof. In all cases, the opening must provide a minimum of 1 inch clearance to the vent pipe, i.e., the hole must be at least 9 $\frac{3}{8}$ " x 9 $\frac{3}{8}$ " (240 x 240 mm).
5. Place fireplace into position.
6. Place firestop(s) #7DVFS or Attic Insulation Shield #7DVAIS into position and secure. (Fig. 43)
7. Install roof support (Fig. 44) and roof flashing making sure upper flange is below the shingles. (Fig. 46)
8. Install appropriate pipe sections until the venting is above the flashing. (Fig. 46)
9. Install storm collar and seal around the pipe.
10. Add additional vent lengths for proper height. (Fig. 45)
11. Apply high temperature sealant to 4" and 7" collars of vertical vent termination and install.

If there is a room above ceiling level, fire stop spacer must be installed on both the bottom and the top side of the ceiling joists. If an attic is above ceiling level a 7DVAIS (Attic Insulation Shield) must be installed.

The enlarged ends of the vent section always face downward.

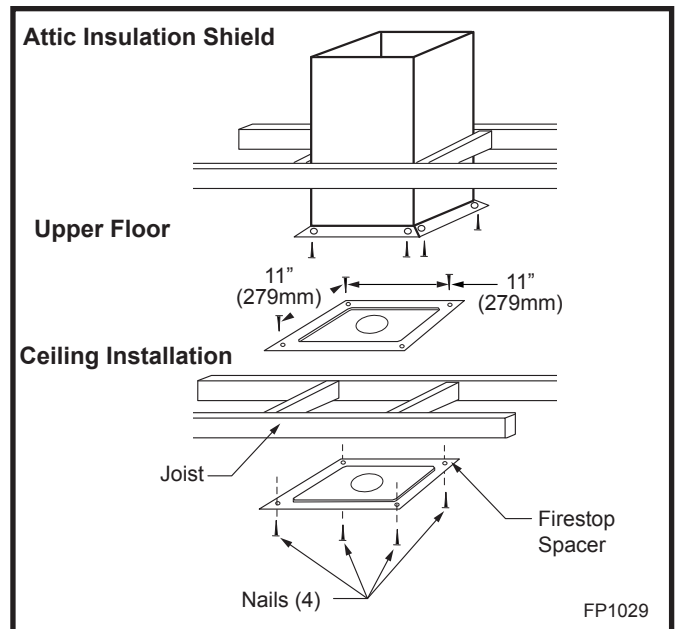


Fig. 43 Place firestop spacer(s) and secure.

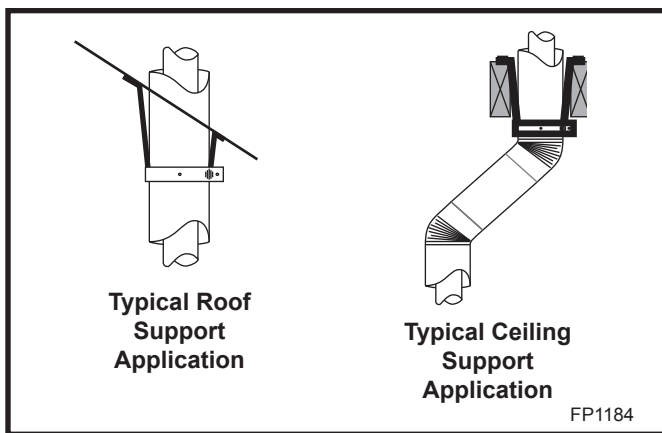


Fig. 44 Venting supports.

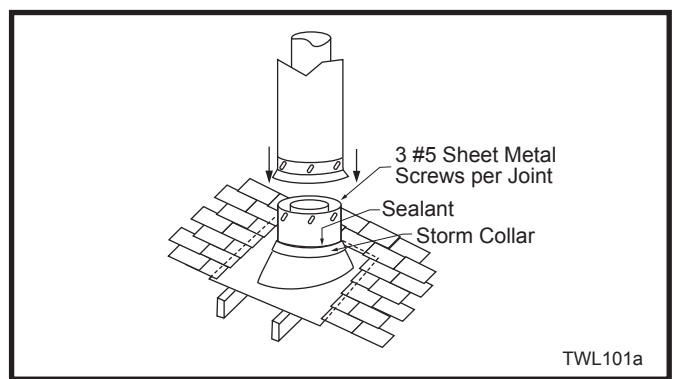


Fig. 46 Roof flashing.

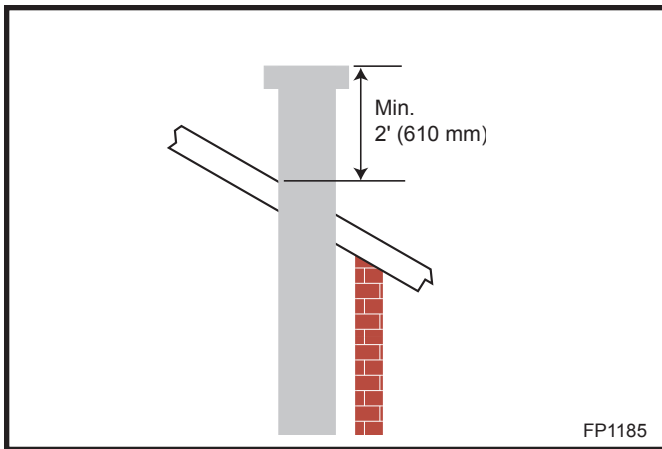
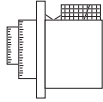
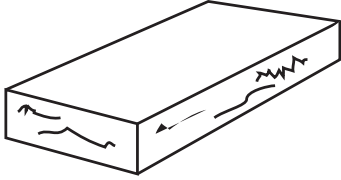
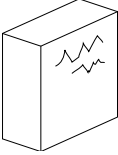
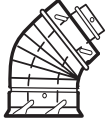

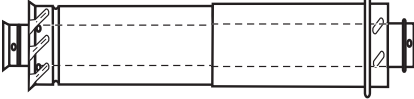
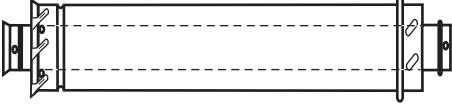
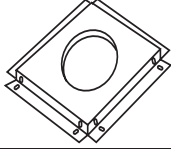




Fig. 45 Minimum termination to roof clearance.

Venting Components

	7TDVRVT - Through the wall Rear Vent Termination
	<p>Starter Kit -</p> <p>Model 7TDVSK - Sidewall Venting (Twist Lock Pipe)</p> <p>Model 7FDVSK - Sidewall Venting (Flex Vent Pipe)</p> <p>Models 7TDVTK/TV - Hot Touch Termination Kits</p> <p>Model 7TDVTVTK/TV - Cool Touch Termination Kit</p> <p>Starter Kit - Model 7TDVSKV - Vertical Venting for 7TDVSKV-A order 1/12 to 6/12 roof pitch for 7TDVSKV-B order 7/12 to 12/12 roof pitch for 7TDVSKV-F order flat roof</p> <p>Starter Kit for Below Grade Installation</p> <p>Model 7TDVSKS -Snorkel Kit (Twist Lock Pipe)</p> <p>Model 7FDVSKS -Snorkel Kit (Flex Vent Pipe)</p>
	<p>Starter Pipe</p> <p>Model 7TDVP 20/8 - 24" Starter Pipe Bulk</p> <p>Model 7FDVP 30/8 - 30" Flex Pipe Bulk</p>
	<p>45° Elbow</p> <p>7TDV45 for Rear Vent to Vertical Vent or Vertical/Horizontal Offsets</p>
	<p>90° Transition Elbow</p> <p>7TDVRT90 for Rear Vent to Vertical Vent</p> <p>90° Elbow</p> <p>7TDV90 Vertical/Horizontal Offset</p>
	<p>Telescopic vent sections</p> <p>7TDVP1117 -11" to 17" adjustable length</p> <p>7TDVP3567 -35" to 67" adjustable length</p>
	<p>Pipe sections for vertical or horizontal venting</p> <p>Model 7TDVP8" - 4 per box</p> <p>Model 7TDVP12" - 4 per box</p> <p>Model 7TDVP24" - 4 per box</p> <p>Model 7TDVP36"</p> <p>Model 7TDVP48"</p>
	<p>Firestop Spacer</p> <p>Model 7DVFS</p>
	<p>Attic Insulation Shield</p> <p>Model 7DVAIS</p>
	<p>Vertical/Horizontal Combination Offset Support</p> <p>Model 7DVCS</p>

Operating Instructions

Glass Information



Only glass approved by CFM Corporation should be used on this fireplace.

- The use of any non-approved replacement glass will void all product warranties.
- Care must be taken to avoid breakage of the glass.
- **Do not operate appliance with glass front removed, cracked or broken.**
- **Replacement glass (complete with gasket and window frame) is available through your CFM Corporation dealer and should only be installed by a licensed qualified service person.**

! WARNING



HOT GLASS WILL CAUSE BURNS.

DO NOT TOUCH GLASS UNTIL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.

Louvre Removal

To remove louvre assembly top, pull louvre up and then lift out. The louvre assembly bottom is hinged at the bottom edge and swings down. (Fig. 47)

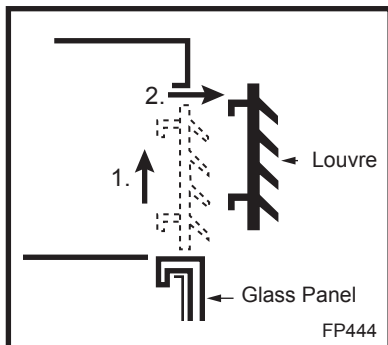


Fig. 47 Remove louvre assembly top.

Window Frame Assembly Removal

1. Turn the fireplace OFF (including the pilot).
2. If the unit has been operating, allow time for the components to cool.
3. Remove louvre assembly top.
4. Open the louvre assembly bottom.
5. Release the two clamps along lower edge of the frame by pulling down on clamp handles. (Fig. 48)
6. Tilt window frame assembly out slightly at the bottom, lift the frame up and away from the fireplace.
7. To replace window frame assembly reverse procedure.

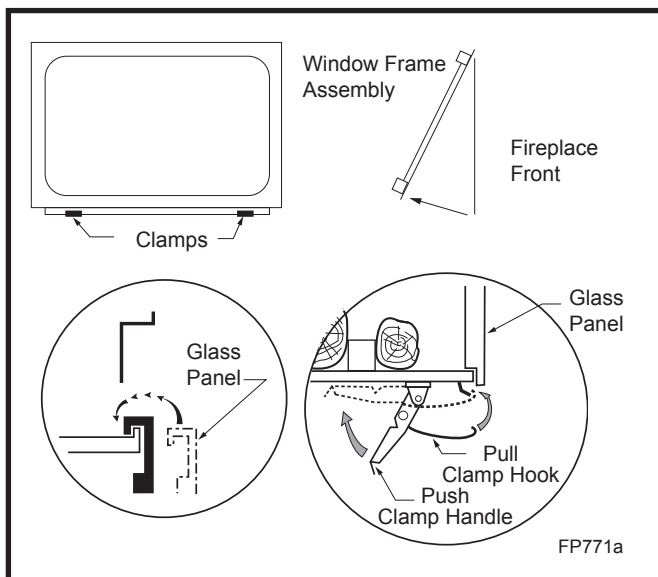


Fig. 48 Window frame assembly removal.

Glass Cleaning

It is necessary to clean the glass periodically. During start-up condensation, which is normal, forms on the inside of the glass and causes lint, dust and other airborne particles to cling to the glass surface. Also initial paint curing may deposit a slight film on the glass. It is therefore recommended the glass be cleaned two or three times with a non-ammonia household cleaner and warm water (gas fireplace glass cleaner is recommended). After the initial cleaning process the glass should be cleaned two or three times during each operating season depending on the environment in the house.



Clean the glass after the first two weeks of operation.

Do not clean glass when hot.

Do not use abrasive cleaners.

Do not strike or slam the glass.

Installation of Logs



The logs are fragile and should be handled with care. Keep the packaging material out of the reach of children and dispose of the material in a safe manner.



The individual logs can be easily identified by the numbers cast on the underside of each log.

1. Remove the top louvre assembly.
2. Open the bottom louvre.
3. Remove the window frame assembly.
4. Remove log box from inside firebox.
5. Unpack the logs from packaging and remove each log from its wrapping material. Set aside the ember and the lava rock bags.



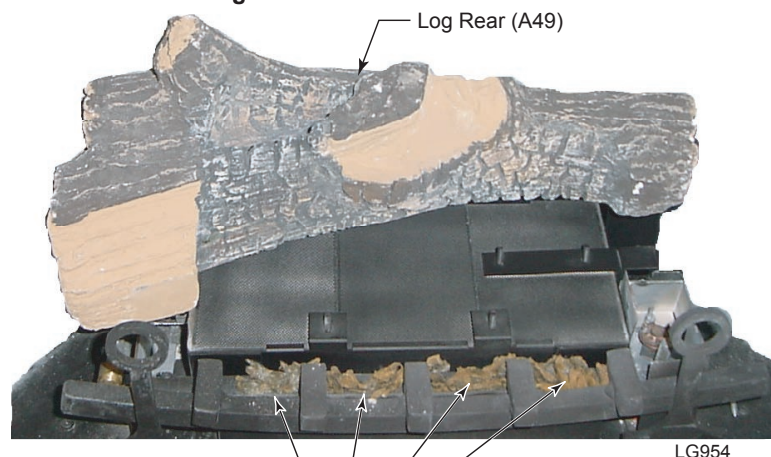
As with all plastic bags - these are not toys and should be kept away from children and infants.

Log Identification Chart

LOGS	33XDV	36XDV	39XDV
Log Rear	A49	B152	20010994
Log Center Right	A51	B153	--
Log Right Top	A52	B154	20010995
Log Front	A50	B155	--
Log Cross Over Center	A53	B156	--
Log Left Top	A54	B157	--
Log Top Center	--	--	20010677
Log Front Right	--	--	20010672
Log Front Left	--	--	20010996
Log Overlay	--	--	20010674

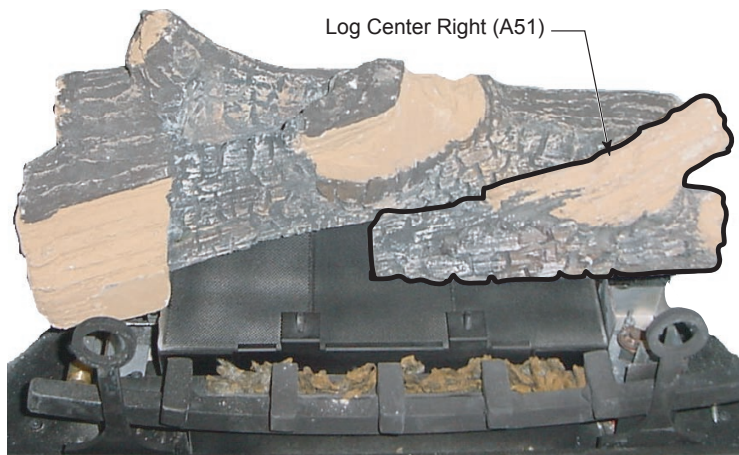
33XDV

Figure 49



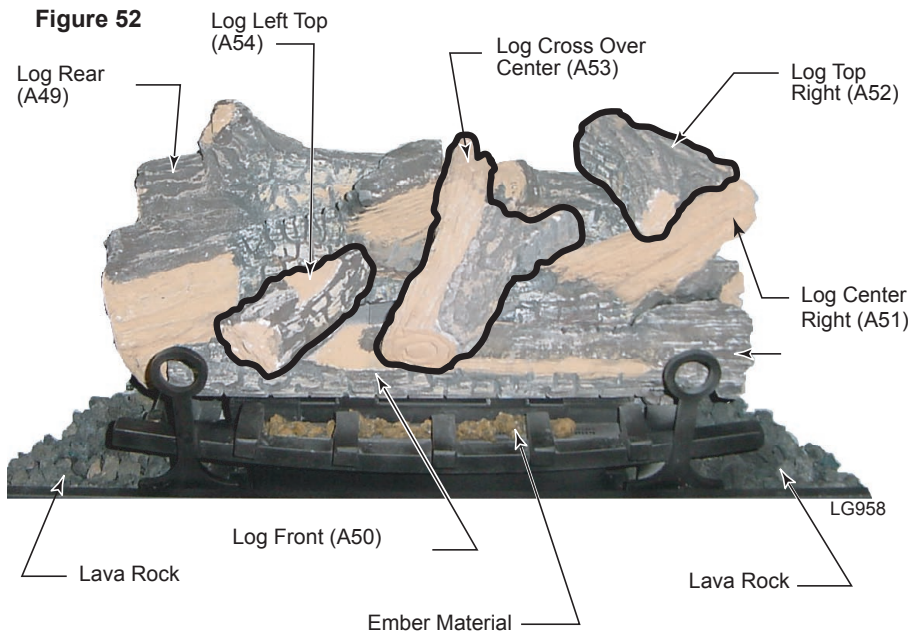
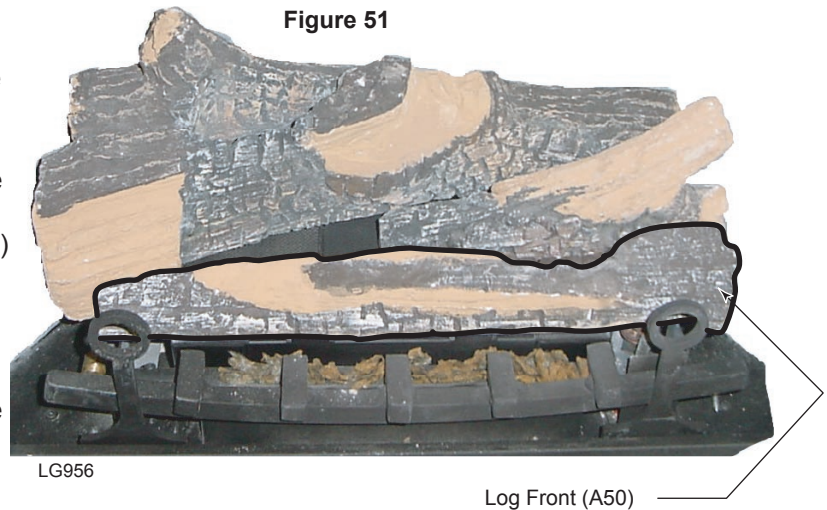
1. Place ember material on top of front burner. Separate the ember material into small pieces approximately 1/2" in diameter and keep 1/2" space between the ember pieces. (Fig. 49)
2. Place the log rear (A49) over the rear log bracket. Align the underside hole on the left to sit over the pin stud pointing up on the rear log bracket. Push the right side of the log against the back. (Fig. 49)

Figure 50



3. Place the log center right (A51). Place the two underside holes of the log over the two pin studs of the bracket on the right side of the burner housing. (Fig. 50)

4. Place the log front (A50). Place the two underside holes of the log over the two pin studs of the bracket located at the front of the burner housing. (Fig. 51)
5. Place the log top right (A52). Place the bottom round hole onto the knob at the right side of the rear log. The cross section of the log will rest on top of the center right log. (Fig. 52)
6. Position the log cross over center (A53) by locating the bottom rectangular slot of this log onto the knob at the center of the front log. The other end of the log, with the bottom round hole, will be on the knob located on the top center of the rear log. (Fig. 52)



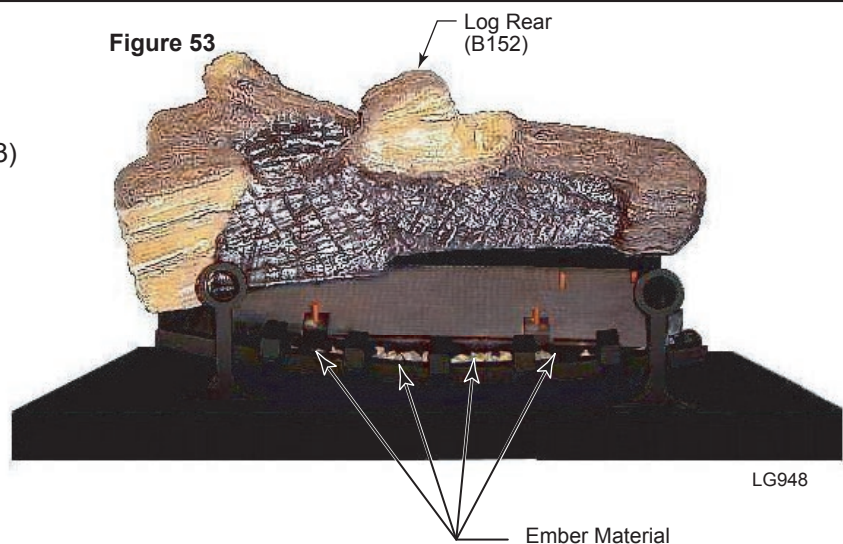
7. Place the log left top (A54). Place the bottom rectangular slot of this log onto the knob at the left side of the front log. (Fig. 52)
8. Place large lava rock onto the two sides of the burner tray as shown in Figure 52.



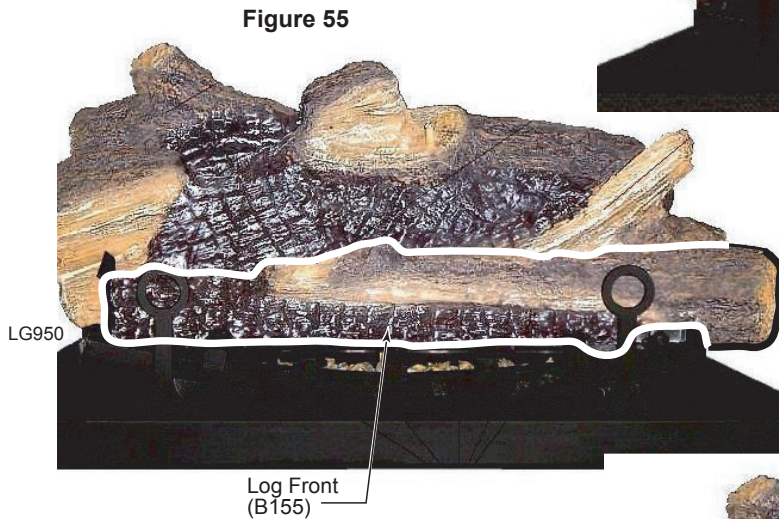
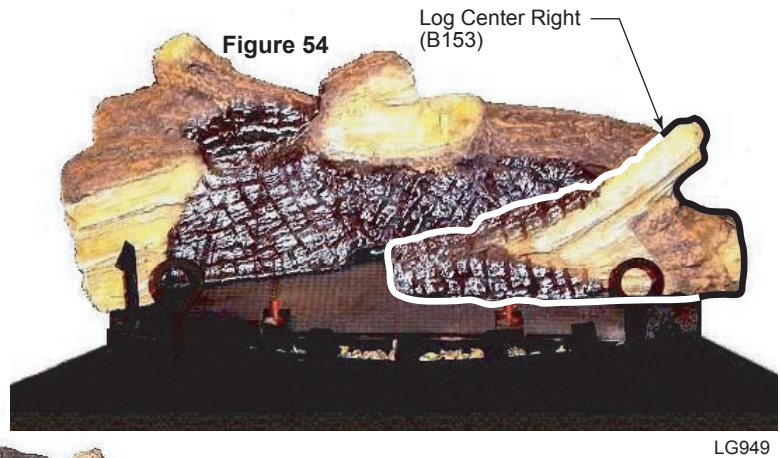
Do not place any of the lava rock material on the burner housing assembly.

36XDV

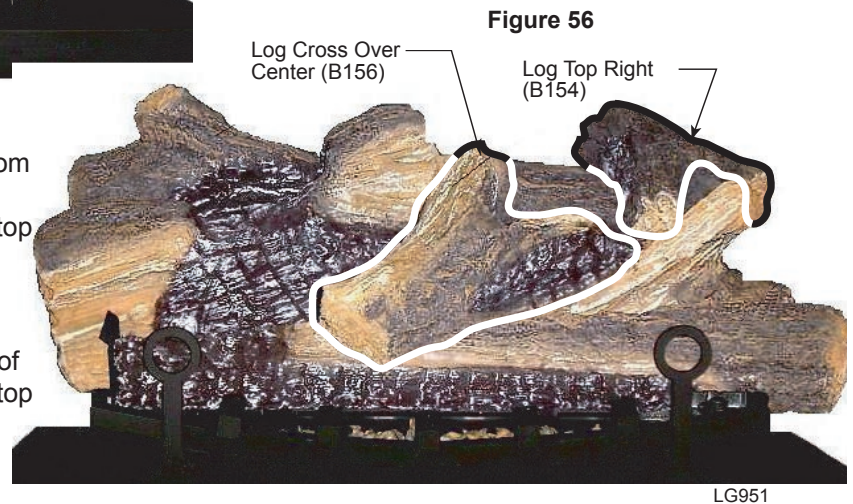
1. Place the log rear (B152). Place the two underside holes of the log over the two pins studs of the rear log bracket. (Fig. 53)



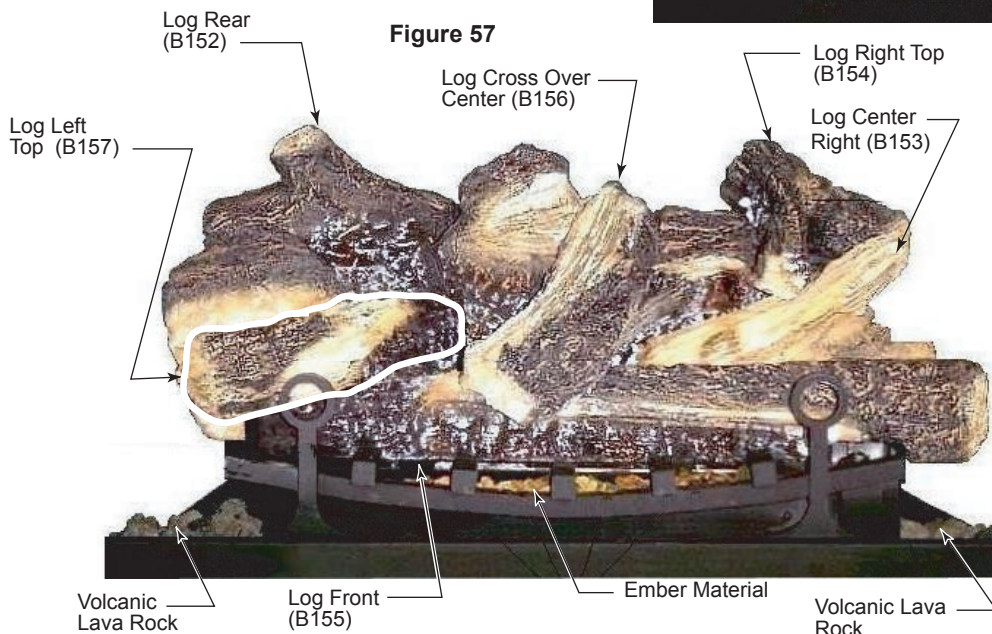
- Place the log, center right (B153). Place the two underside holes of the log over the two pin studs of the bracket support center log on the right. (Fig. 54)



- Place the log, front (B155). Place the two underside holes of the log over the two pin studs of the bracket front log support located at the front of the burner housing. (Fig. 55)



- Place the log, top right (B154). Place the bottom round hole onto the pin of the rear log at the right. The cross section of the log will rest on top of the center right log. (Fig. 56)
- Position the log, cross over center (B156) by locating the bottom rectangular slot of this log onto the front log center knob. The other end of the log with the bottom round hole will set on top of the rear log center pin. (Fig. 56)



- Place the log, front left (B157). Place the bottom rectangular slot of this log onto the knob of the front log at the left. (Fig. 57)
- Place ember material on top of front burner. Ensure separating the ember material into small pieces approximately 1/2" diameter and keep 1/2" space between the ember pieces. (Fig. 57)
- Place large lava rock onto the two sides of the burner tray as shown in Figure 57.



Do not place any of the lava rock material on the burner housing assembly.

39XDV

NOTE: Refer to Figure 56 for bracket and bend locations.

1. Place the log front right. Hold the log with the pointed end toward the left. Place on top of burner toward the right. Slide the log toward the front until it comes in contact with the bracket at the front of the burner housing behind the burner tube. (Fig. 58) Adjust the log until the pointed end on the left is aligned with the left edge of the bracket. (Fig. 59)

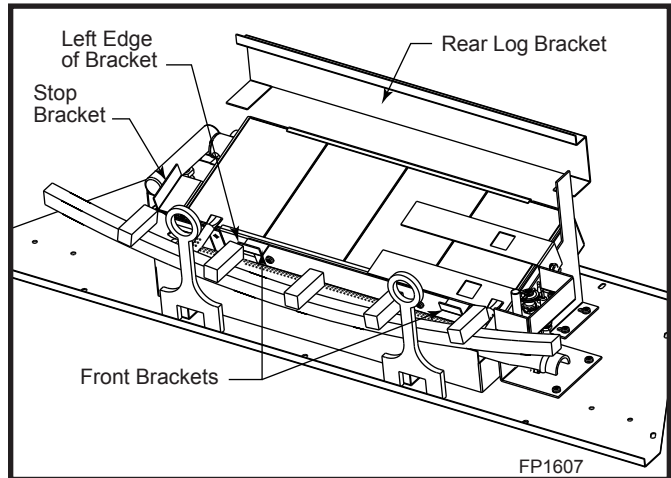
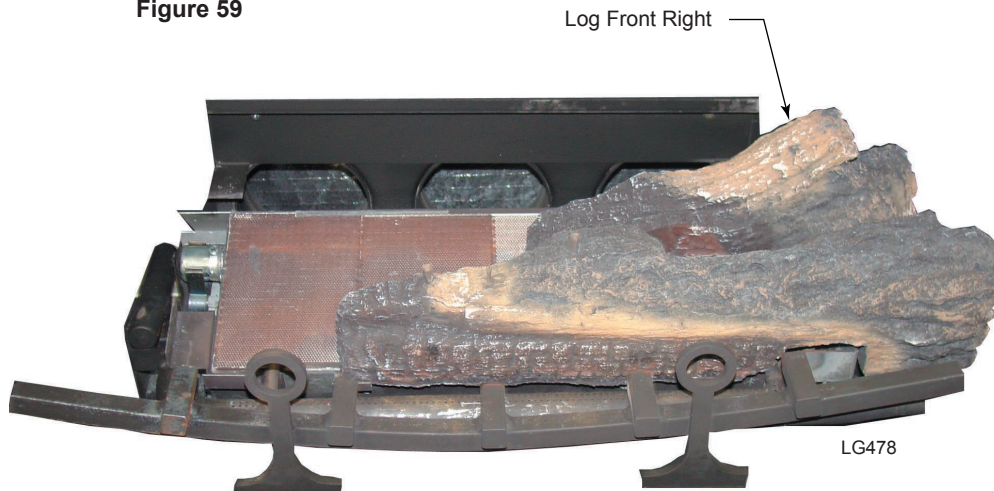


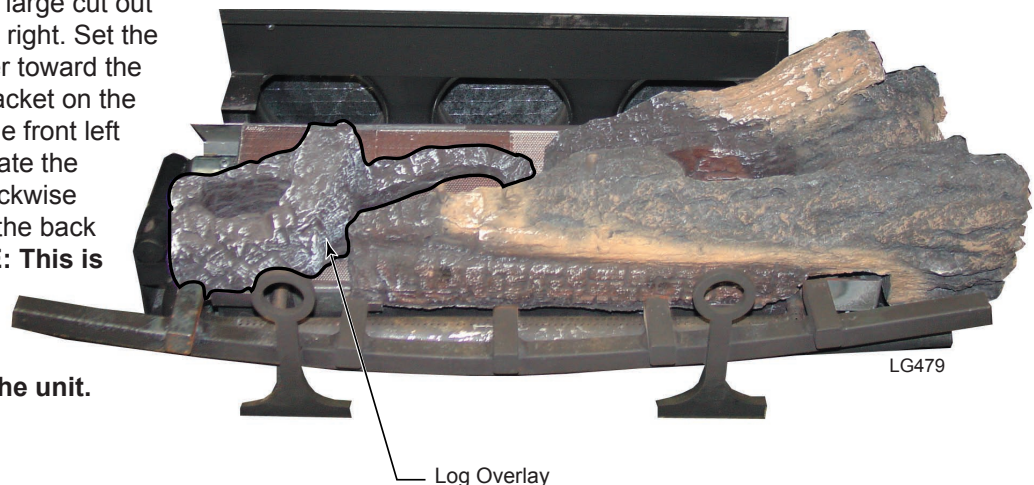
Fig. 58 Burner brackets and bends.

Figure 59

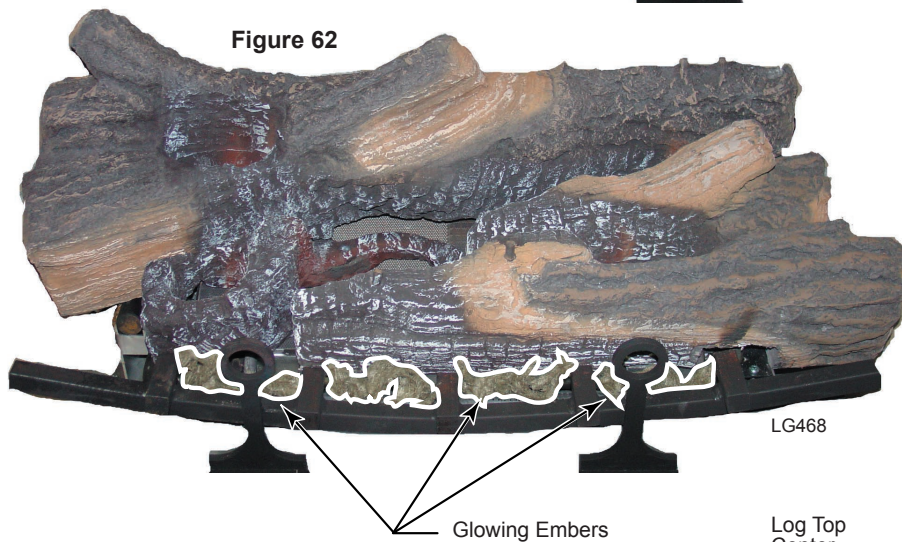
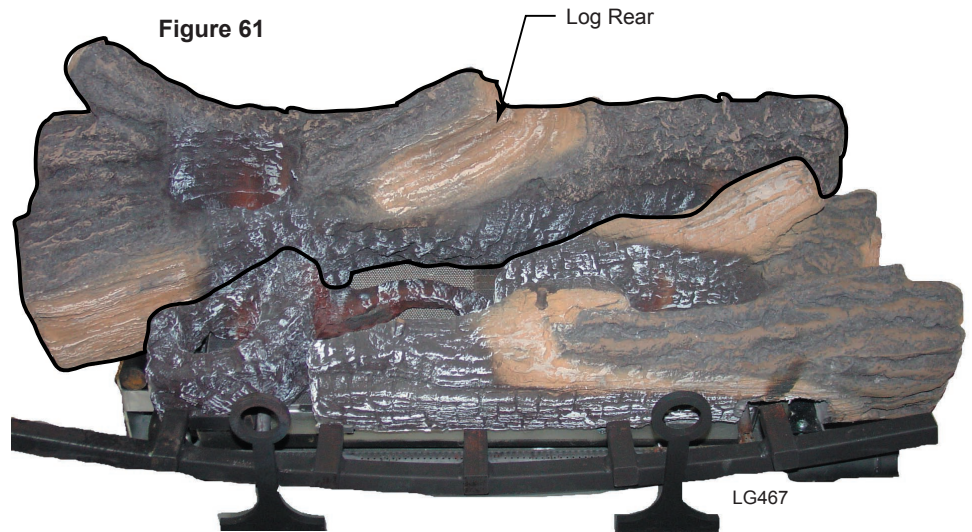


2. Place the log overlay. Hold the overlay with the flat side down and large cut out for the middle flame on the right. Set the overlay on top of the burner toward the left front inside the stop bracket on the left end and the bend on the front left of the burner. (Fig. 60) Rotate the right end of the overlay clockwise until it makes contact with the back of the log front right. **NOTE: This is very critical as improper positioning of the overlay will affect the flame and the performance of the unit.** (Fig. 60)

Figure 60

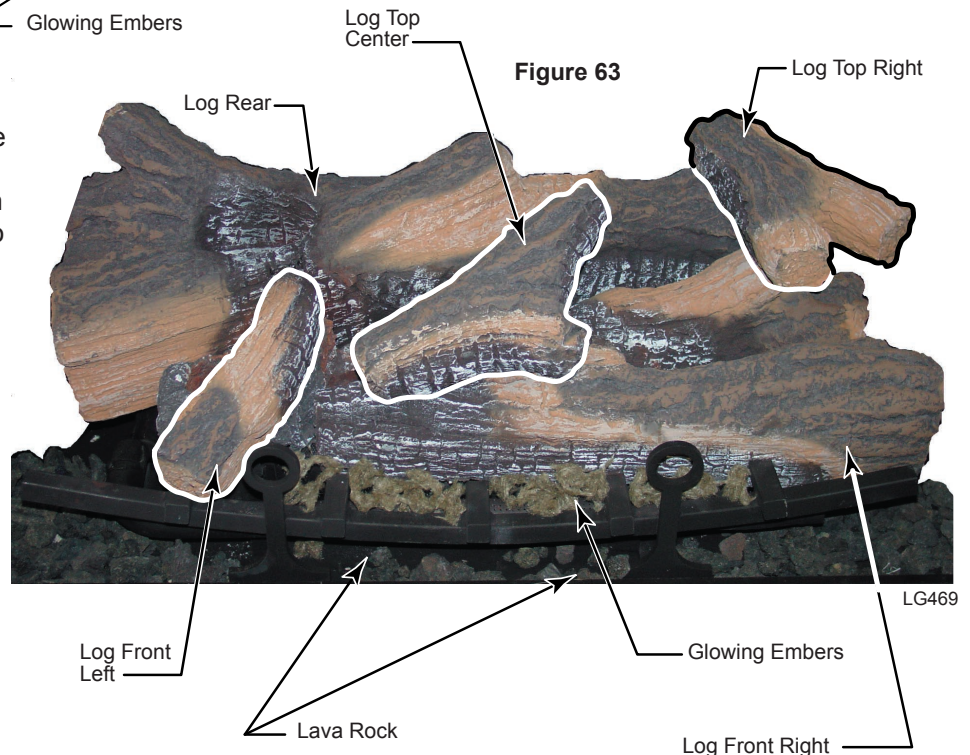


3. Place log rear. The rear log sits in the firebox at an angle toward the left over the rear log bracket and the left side of the burner. (Fig. 58) Set the log on the rear log bracket. Slide the log to the right until the bracket lines up with the left side of the notch on the rear log. Swing the left end of the log toward the front until it makes contact with the stop bracket. (Fig. 61)



4. Place the glowing embers by building them up lightly between the fettle and the burner tube assembly. (Fig. 62)
5. Place the log front left. Set the log by matching the square hole on the bottom with the pins on the overlay. The right side of this log should come in contact with the left andiron. Lay the log at an angle to the left over the fettle. When this log is in place, it must not cover the front left opening of the overlay. (Fig. 63)

6. Place the log top center. Hold the log with the pointed end toward the back. Match the two holes on the bottom of the log with the two pins on the top of the log front right. Set the log and lay it into the rear log. (Fig. 63)
7. Place the log top right. Hold the log with pointed end to the left. Match the two holes on the bottom of the log with the two pins on the rear log and set the fork on the log over the right front log. (Fig. 63)
8. Place the lava rock on the hearth refractory in the front as desired. (Fig. 63)



Burner Lava Rock Placement

Place the contents of the small bag of ceramic burner lava embers on the burner in front of the front logs. Do not place burner lava rock in the inside corners of the front logs.

Large Lava Rock

The large bag of lava rock provided with this fireplace must be placed on the firebox base around the sides of the burner assembly and on the tray beneath the grate.

Under no circumstances should this large lava rock be placed on any part of the burner assembly.

Flame & Temperature Adjustment

For fireplaces equipped with Hi/Lo valves, flame adjustment is accomplished by rotating the Hi/Lo adjustment knob located near the centre of the gas control. (Fig. 64 or 65)

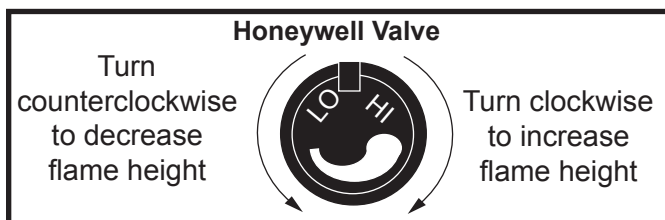


Fig. 64 Flame adjustment knob for Honeywell valve.

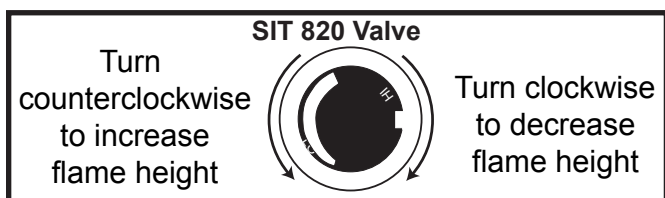


Fig. 65 Flame adjustment knob for SIT valve.

Manual ON/OFF Valve

The Manual ON/OFF valve was designed particularly for the main burner operation. The main burner flame can be turned on and off as desired. This valve is recommended to be set to the "ON" position when lighting the unit. (Fig. 66)

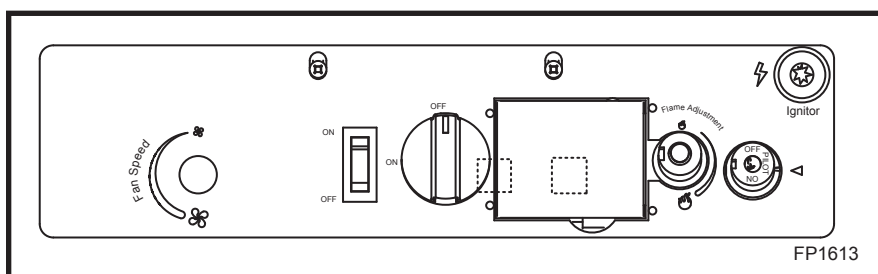


Fig. 66 Manual ON/OFF valve shown on RN/RP models.

Flame Characteristics

It is important to periodically perform a visual check of the pilot and the burner flames. Compare them to Figures 67-68. If any of the flames appear abnormal call a service person.

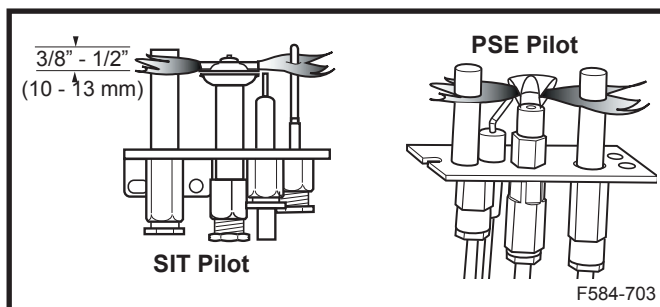


Fig. 67 Correct pilot flame appearance.

Inspecting the Venting System

This appliance venting system is designed and constructed to develop a positive flow adequate to remove flue gases to the outside atmosphere.

Any foreign objects in the venting system, except those designed specifically for the venting system, may cause spillage of flue gases.

To inspect the venting system, make sure the main gas valve is off. Remove window frame assembly (Refer to Window Frame Assembly Removal Section). Using a flashlight, check the area above the baffle in the combustion dome. Clean if necessary.

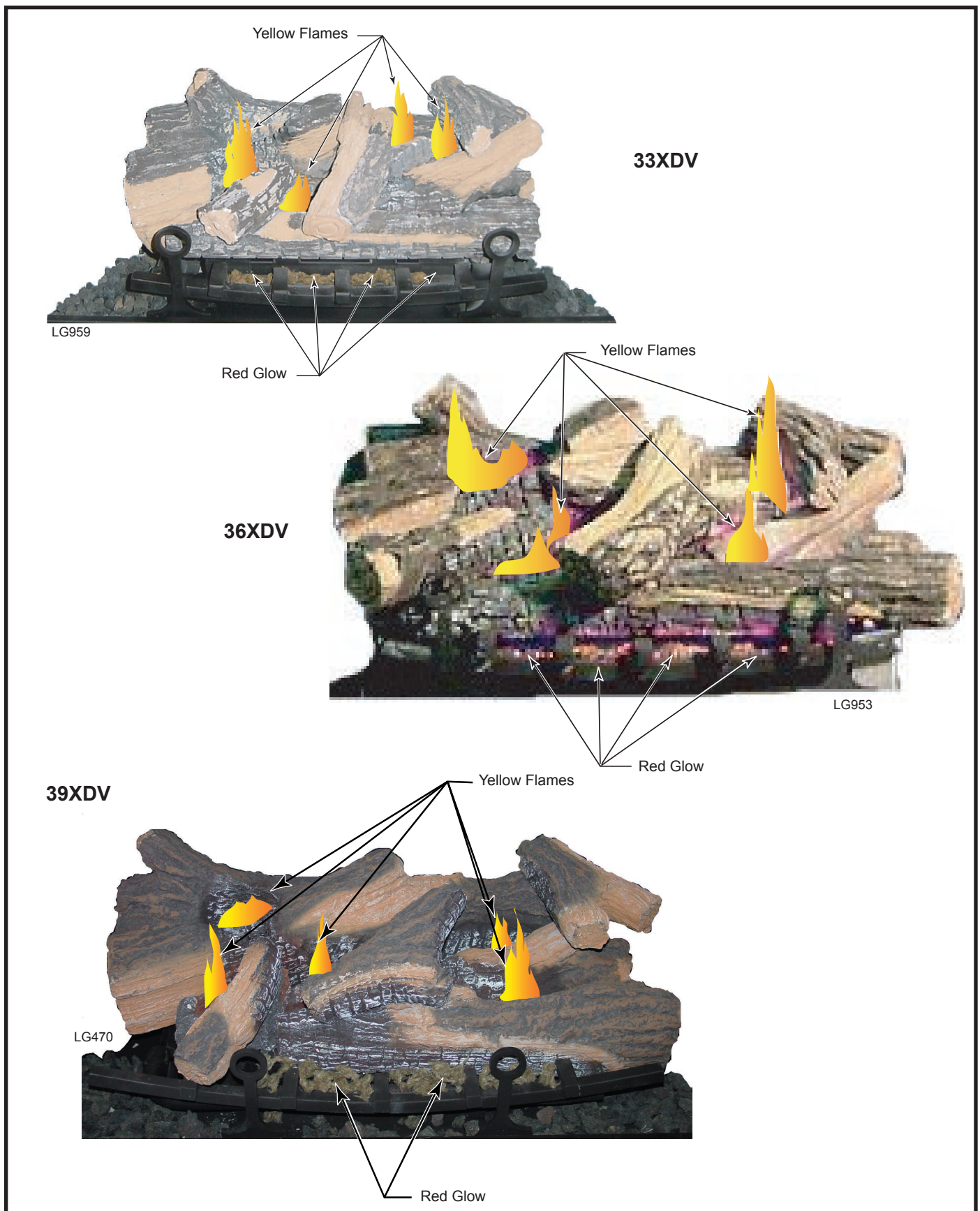


Fig. 68 Correct burner flame appearance.

Lighting and Operating Instructions

FOR YOUR SAFETY READ BEFORE LIGHTING


WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

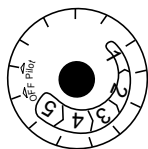
- A. This heater has a pilot which must be lit manually. When lighting the pilot follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the heater area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

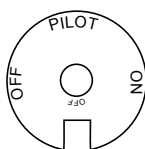
- Do not try to light any fireplace
 - Do not touch any electric switch
 - Do not use any phone in your building
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the Fire Department
 - C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, do not try to repair it, call a qualified service technician. Applying force or any attempted repair may result in a fire or explosion.
 - D. Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the heater and to replace any part of the control system and any gas control which has been under water.

Lighting Instructions

1. **STOP!** Read the safety information above.
2. Turn off all electrical power to the fireplace.
3. For MN/MP/TN/TP appliances ONLY, go on to Step 4. For RN/RP appliances turn the On/Off switch to "OFF" position or set thermostat to lowest level.
4. Open control access panel.
5. Push in gas control knob slightly and turn clockwise  to "OFF".




Euro SIT



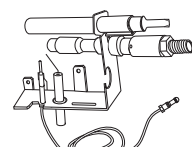
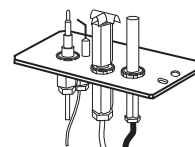
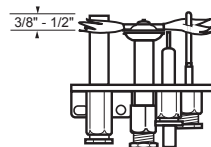
SIT NOVA



Honeywell

6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above. If you do not smell gas, go to the next step.
7. Remove glass door before lighting pilot. (See Glass Frame Removal section).
8. Visibly locate pilot by the main burner.
9. Turn knob on gas control counterclockwise  to "PILOT".

10. Push the control knob all the way in and hold. Immediately light the pilot by repeatedly depressing the piezo spark ignitor until a flame appears. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 8.



- If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
 - If after several tries, the pilot will not stay lit, turn the gas control knob to "OFF" and call your service technician or gas supplier.
11. Replace glass door.
 12. Turn gas control knob to "ON" position.
 13. For RN/RP appliances turn the On/Off switch to "ON" position or set thermostat to desired setting.
 14. Turn on all electrical power to the fireplace.

To Turn Off Gas To Heater

1. Turn the On/Off switch to Off position or set the thermostat to lowest setting.
2. Turn off all electric power to the fireplace if service is to be performed.
3. Open louvre assembly bottom.
4. Push in gas control knob slightly and turn clockwise  to "OFF". Do not force.
5. Close control access panel.

Lighting & Operating Instructions

For Fireplaces equipped with SIT822 Gas Valve (EN or EP)

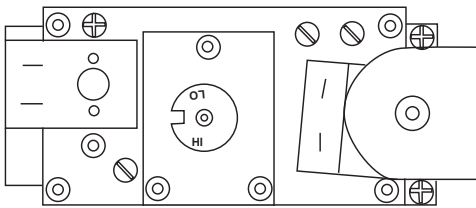
Warning: If you do not follow these instructions exactly, a fire or explosion may result, causing property damage, personal injury and loss of life.

For Your Safety, Read the Following Warnings before Lighting the Appliance

- A. This fireplace is equipped with an ignition device which automatically lights the pilot. **DO NOT** try to light the pilot by hand.
- B. **BEFORE OPERATING**, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than the air and will settle on the floor.
What to do if you smell gas
 - **Do not try to light any appliance.**
 - **Do not operate any electrical switch.**
 - **Do not use any phone in your building.**
 - **Immediately call your gas supplier from a neighbor's phone. Follow the gas suppliers instructions.**
- **If you cannot contact your gas supplier call the Fire Department**
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand do not try to repair it, call a qualified service technician. Force or attempting repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and replace any part of the control system and any gas control that has been under water.

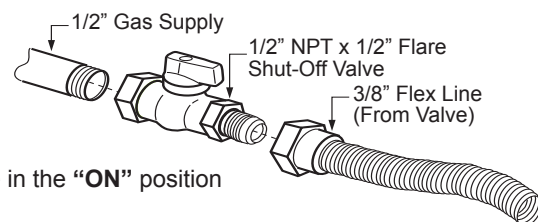
Lighting Instructions

1. **STOP!** Read the safety information above before continuing.
2. Turn off all electrical power to the appliance.
3. This appliance is equipped with an ignition device which automatically lights the pilot. **DO NOT** try to light the pilot by hand.
4. Access the gas control by lowering the lower access door (louvre assembly).
5. Turn the remote switch, if used, OFF. Turn the wireless remote, if used, OFF.
6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP. Follow instruction B in the safety warnings above. If you do not smell gas, go on to the next step.
7. Close the access door.
8. Turn ON all electrical power to the appliance.
9. Turn remote switch or wireless remote to ON.
10. If the appliance will not operate, follow the instructions **TURNING OFF THE GAS TO THE APPLIANCE**, and call your service technician or gas supplier.



Turning Off the Gas to the Appliance

1. Turn the remote switch to the OFF position.
2. Turn OFF all electrical power to the fireplace if service is required.
3. Open the lower access panel.
4. Turn the shut-off valve on the flexible gas line to the OFF position.



Instructions for RF Comfort Control Valve

The Comfort Control Valve allows remote control of temperature, fan and flame appearance.

NOTE: The antenna should hang in free air away from grounded metal.

Operation

1. If the manual switch is in remote position, switch it to LOCAL. (Fig. 69)
2. Turn the pilotstat knob counterclockwise from OFF to the PILOT position, push the knob down, and hold in position. The pilot valve opens and allows gas to flow to the pilot burner.
3. Push plunger on the piezo until the pilot burner is lit. When the pilot burner is lit, the LED on the control will come on after approximately 40 seconds and will be continuously red. When the light turns off which will be approximately 10 seconds after it has been continuously red, the receiver/valve is fully powered.

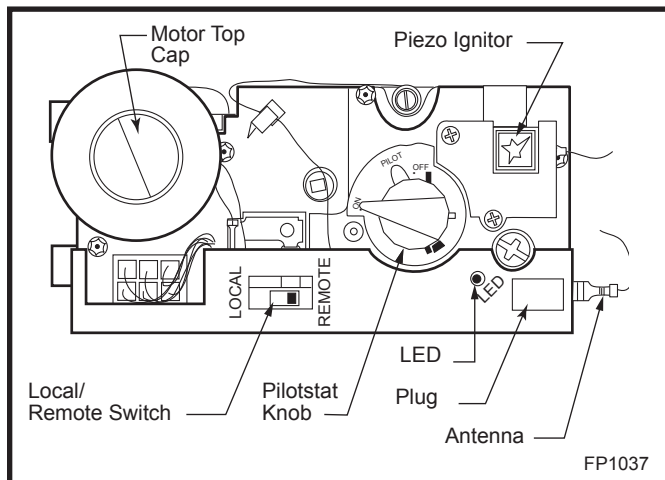


Fig. 69 Comfort control valve.

4. Release the knob. The shaft will move upward. The pilot burner should now stay burning. If the pilot burner goes out, repeat step 2.
5. Turn the knob counterclockwise to the ON position. If the manual switch is in the LOCAL position, the main burner will turn on immediately.
6. ON the initial use of a transmitter, a recognition operation is required between the receiver/valve and transmitter. Change the switch from LOCAL to REMOTE. Press the fan or flame button on the transmitter within 30 seconds. The LED will blink indicating the transmitter will now work with the receiver/valve. If the switch continues in the REMOTE position, the transmitter will now control the main valve, flame modulation level and fan control.

7. If the manual switch is in the LOCAL position, the valve will be at the highest fixed pressure setting. The transmitter will control the fan only.

Shut Off Procedure

If the manual switch is in the REMOTE position, the transmitter can shut off the main burner and fan. However, the control is still on and a command from the transmitter can turn on the main burner or fan.

To shut off the system, turn the pilotstat knob clockwise to the OFF position. This action closes the main gas and safety valves. The transmitter cannot turn on the main burner or fan.

Transmitter Operation

Off Mode

In the OFF mode, the fireplace flame and fan are off, the display will show OFF and displays the room temperature. If the receiver is in REMOTE mode, the fireplace will shut off.

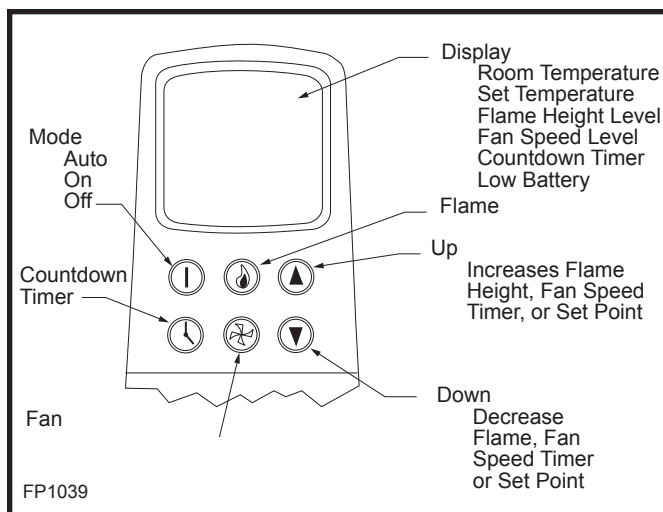


Fig. 70 Transmitter diagram.

On (Manual) Mode

In the ON mode, the room temperature, flame and fan levels will be shown. MANUAL will appear next to both the flame and fan icons.

When the control is in the ON mode, the flame and fan levels, and delay timer are changed with the up and down buttons. To change the flame level, press the flame button followed by an arrow key. To change the fan level, press the fan key followed by an arrow key. Pushing the arrow key once will change the level by one unit.

Delay Timer Mode

The shut off delay timer has a maximum of 2 hours and a minimum of zero minutes. To change the timer level, press the time key followed by an arrow key. Pushing the key once will change the timer by 10 minutes.

Auto Mode

In the AUTO mode, the room temperature, set temperature, flame and fan levels will be shown. AUTO will appear next to both the flame and fan icons.

When the control is in the AUTO mode, the main burner will turn on/off or modulate based on the heat needed to maintain the set temperature. The flame level will change automatically to optimize the heat output needed to maintain the set temperature. To change the set temperature, press the up or down key. Pushing a key once will change the temperature by one degree.

In the AUTO mode, the fan speed will increase with increasing flame height or decrease with decreasing flame height. "AUTO" is displayed next to the flame and fan icons.

Fan Override During Auto Mode

If a lower or higher fan speed is desired when operating in the AUTO mode, the fan speed can be overridden by pushing the fan button followed by the up or down key. Pushing a key once will change the fan level by one unit. In this mode "AUTO" is displayed next to the flame icon and "MANUAL" is displayed next to the fan icon.

Change Between F/C Temperature Units

Push the up and down arrow keys simultaneously for at least 3 seconds to toggle between Fahrenheit and Celsius units.

Disable Thermostat Function

To disable the thermostat function in the AUTO mode, push the time and down keys simultaneously for at least 3 seconds.

To Change Batteries

1. Remove cover on the backside of the transmitter. Install 3 AAA batteries as shown and reattach cover.
2. Once steps 1-3 in OPERATION are completed, receiver/valve and transmitter are now ready. Press any button on transmitter for recognition process to occur between the receiver/valve and transmitter.
3. Use functions as described in TRANSMITTER section.

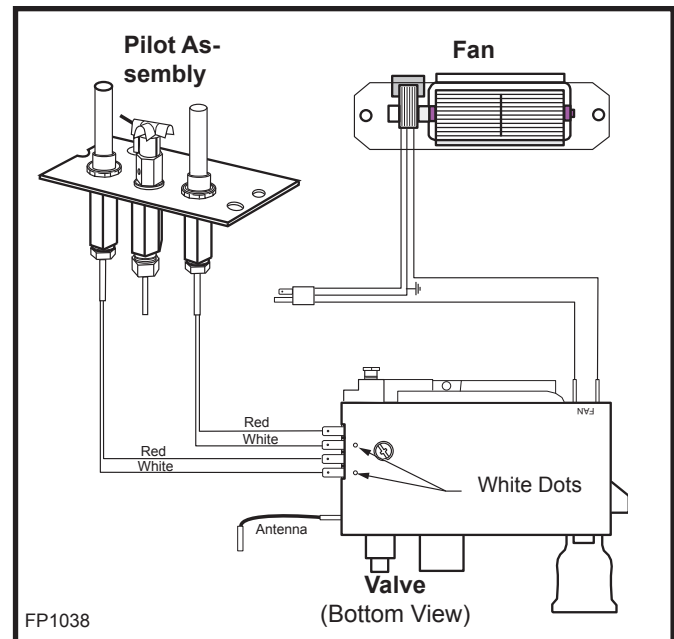


Fig. 71 Comfort Valve wiring diagram.

Troubleshooting

1. Locate LED light on valve.
2. LED will blink after every valid command received by the transmitter; this is not an error.
3. Failure codes may occur anytime after pilot burner is lit.
4. Sequence is failure code followed by light not blinking for 30 seconds.
5. In the event of multiple failure codes, next failure code follows previous failure code by approximately 3 seconds.

If an Error Code 3 is observed while performing the testing, complete the following:

1. Make sure the spade connectors are pushed all the way on. If the Error Code 3 is still showing, then go to the next step.
2. Switch the front two thermopile leads with the back two. Be sure the white lead is connected to the spade with the white dot next to it. If the Error Code 3 is still showing, replace the thermopiles.

If an Error Code 8 is observed while performing the testing, complete the following:

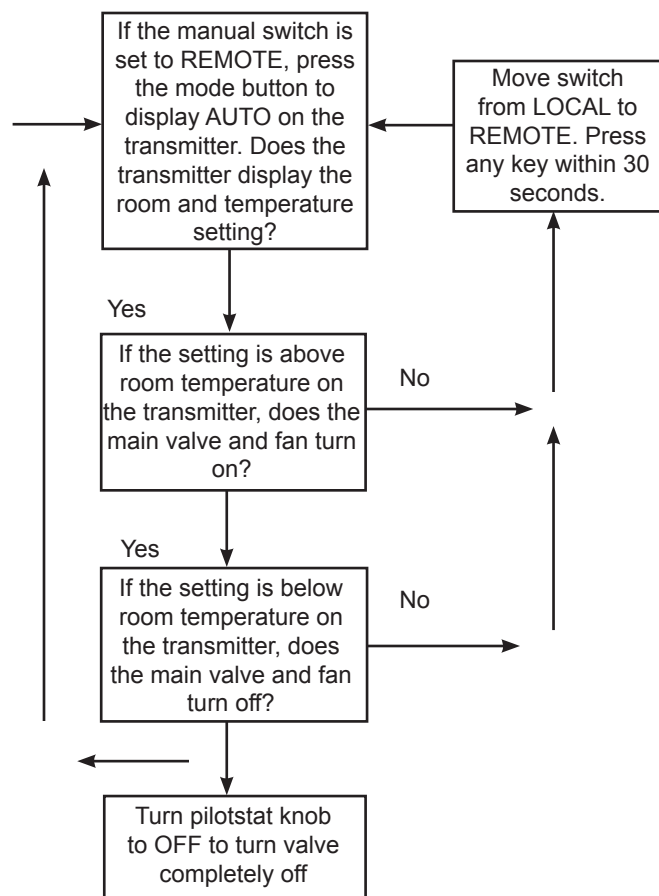
1. Confirm the valve is not in REMOTE mode.
 - If the valve is producing Error Code 8 and in REMOTE mode, the valve is defective and should be replaced.
 - If the valve is in LOCAL mode and producing Error Code 8, then go to the next step.

2. Slide the Remote/Local switch to REMOTE and teach the valve a transmitter (refer to Item 6, page 32). The Error Code will clear itself after approximately 1½ minutes and return to normal operation.

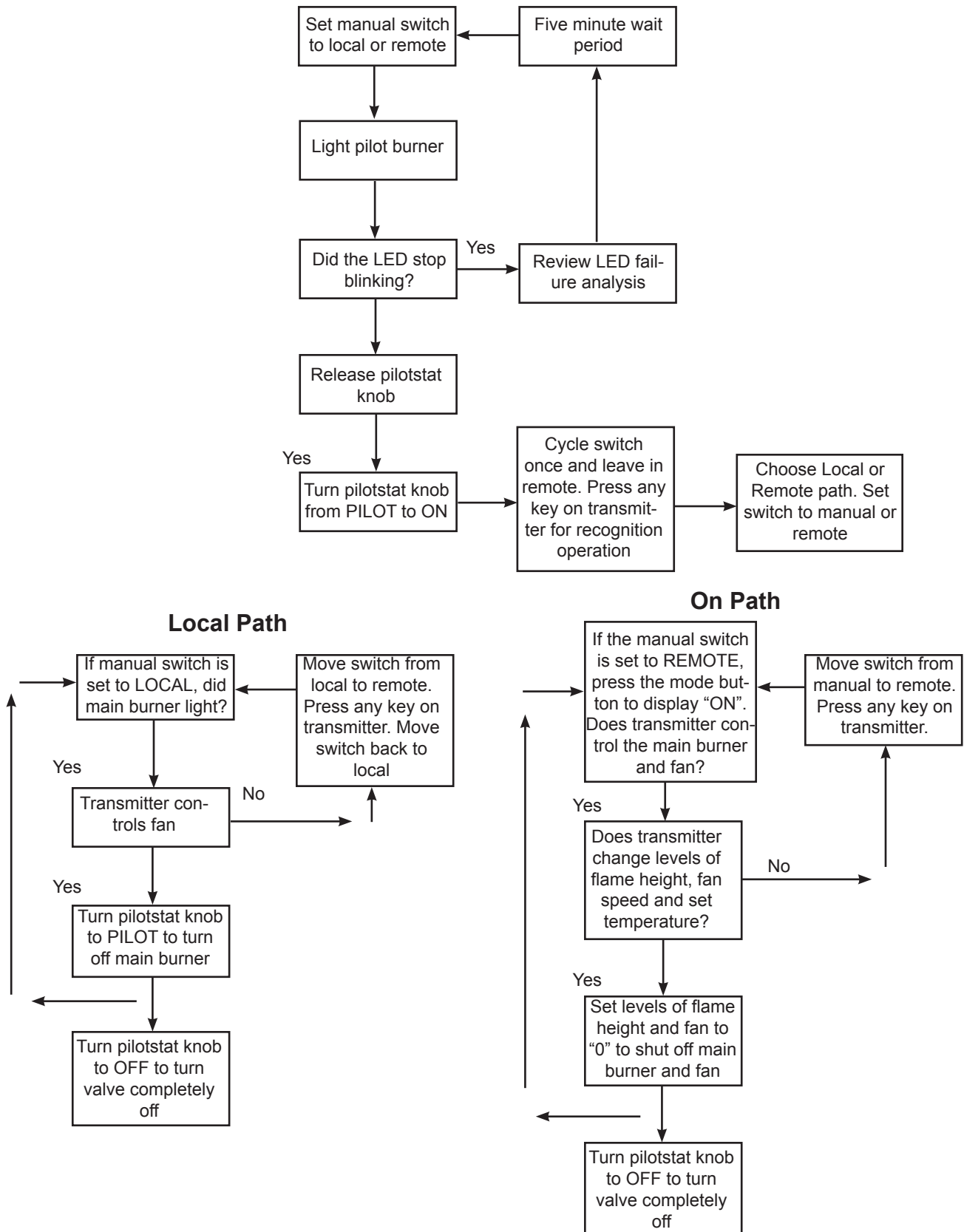
LED Count	Service Action
8	Replace valve
7	Confirm stepper motor connection exists
5	Confirm fan connection exists and works
4	Confirm gas type; jumper in place
3	Replace thermopiles
2	Turn fan ON

NOTE: Some keys are not active.

Auto Path



Comfort Valve system control sequence of operation with transmitter



Troubleshooting the Gas Control System

SIT NOVA 820 MILLIVOLT VALVE

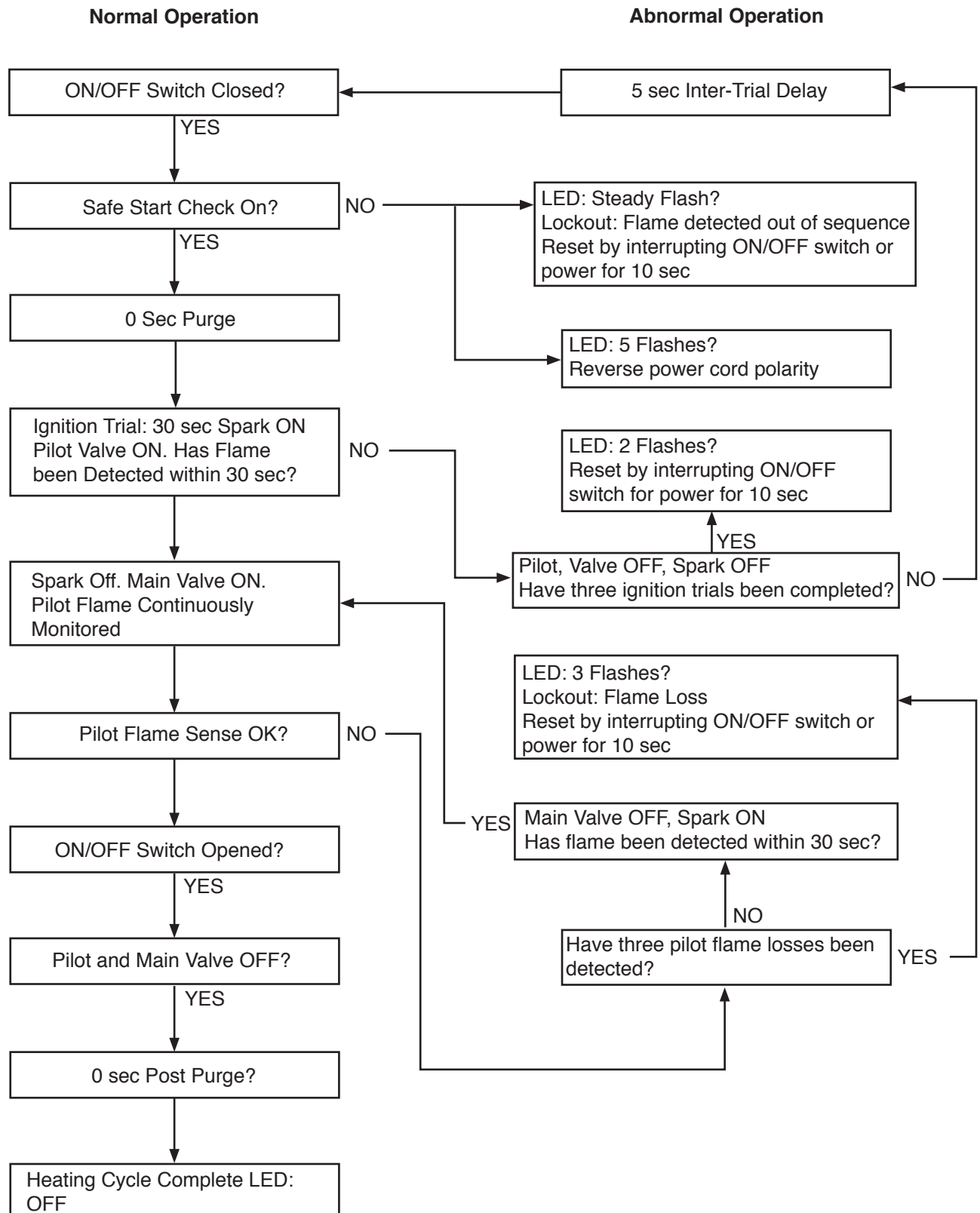
NOTE: Before troubleshooting the gas control system, be sure external gas shut off is in the "On" position.

WARNING: REMOVE GLASS FRONT BEFORE DOING ANY GAS CONTROL SERVICE WORK.

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
1. Spark ignitor will not light	A. Defective or misaligned electrode at pilot.	Using a match, light pilot. If pilot lights, turn off pilot and push the red button again. If pilot will not light, check the gap at electrode and pilot; it should be 1/8" to have a strong spark.
	B. Defective ignitor (Push Button)	Push piezo Ignitor Button. Check for spark at electrode and pilot. If no spark to pilot, and electrode wire is properly connected, replace ignitor.
2. Pilot will not stay lit after carefully following lighting instructions.	A. Defective pilot generator (thermocouple), remote wall switch.	Check pilot flame. Must impinge on thermocouple/thermopile. NOTE: This pilot burner assembly utilizes both a thermocouple and a thermopile. The thermocouple operates the main valve operation (ON/OFF). Clean and/or adjust pilot for maximum flame impingement on thermopile and thermocouple.
	B. Defective automatic valve	Turn valve knob to "Pilot." Maintain flow to pilot; millivolt meter should read greater than 10 mV. If the reading is okay and the pilot does not stay on, replace the gas valve. NOTE: An interrupter block (not supplied) must be used to conduct this test.
3. Pilot burning, no gas to main burner	A. Wall switch or wires defective	Check wall switch and wires for proper connections. Jumper wires across terminals at wall switch; if burner comes on, replace defective wall switch. If okay, jumper wires across wall switch wires at valve; if burner comes on, wires are faulty or connections are bad.
	B. Thermopile may not be generating sufficient millivoltage.	<ol style="list-style-type: none"> 1. Be sure wire connections from thermopile at gas valve terminals are tight and thermopile is fully inserted into pilot bracket. 2. One of the wall switch wires may be grounded. Remove wall switch wires from valve terminals if pilot now stays lit, trace wall switch wiring for ground. May be grounded to fireplace or gas supply. 3. Check thermopile with millivolt meter. Take reading at thermopile terminals of gas valve—should read 250-300 millivolts (minimum 150) while holding valve knob depressed in pilot position and wall switch "OFF." Replace faulty thermopile if reading is below specified minimum.
	C. Plugged burner orifice.	Check burner orifices for debris and remove.
	D. Defective automatic valve operator.	Turn valve knob to "ON," place wall switch to "ON" — millivolt meter should read greater than 100 mV. If the reading is okay and the burner does not come on, replace the gas valve.
4. Frequent pilot outage problem.	A. Pilot flame may be too low or blowing (high) causing the pilot safety to drop out.	Clean and/or adjust pilot flame for maximum flame impingement on thermopile and thermocouple.
	B. Possible blockage of the vent terminal.	Check the vent terminal for blockage (recycling the flue gases)

Troubleshooting the Gas Control System

SIT 822 Valve with Synetek Electronic Control
Operating Diagram



Conversions must be completed by qualified personnel

Fuel Conversion Instructions

To convert the XDV units for use with a different gas follow these instructions. Before proceeding, turn control knob on valve to **"OFF"** and turn gas supply **OFF**. Turn **OFF** any electricity that may be going to the appliance.

CAUTION: Logs may be HOT! Allow to cool before proceeding.

1. Open louvre assembly bottom to gain access to valve. Remove window frame assembly. (Refer to "Window Frame Assembly Removal", Page 25, Fig. 48)
2. Remove logs if previously installed.

Honeywell Valve

1. Remove cap from HI/LO knob. This can be accomplished by lifting the plastic cap off the screw. (Fig. 72)
2. Remove the screw from center of HI/LO knob with small screwdriver turning counterclockwise. (Fig. 72)
3. Insert conversion screw supplied in conversion kit. Blue for natural gas, red for LP.
4. Tighten screw, replace cap.

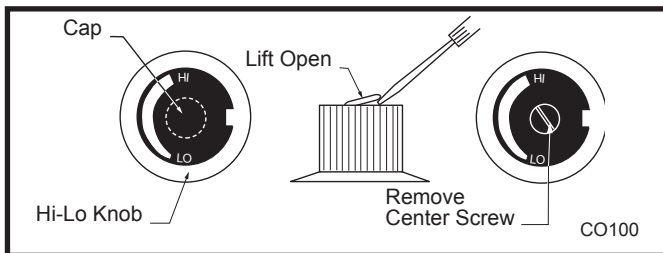


Fig. 72 Remove center screw from Hi-Lo knob.

NOVA SIT820 Valve

1. Using the TORX T20 bit, remove and discard the three (3) pressure regulator mounting screws (A), pressure regulator tower (B) and the spring and diaphragm assembly (C). (Fig. 73)

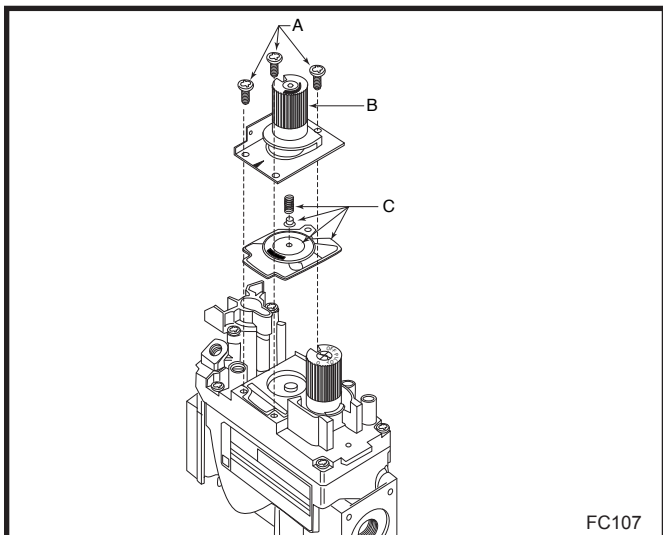


Fig. 73 Remove mounting screws, pressure regulator tower and spring and diaphragm assembly.

2. Insure the rubber gasket (D) is properly positioned and install the new HI/LO pressure regulator assembly to the valve using the new screws (E) supplied with the kit. Tighten the screws securely. (Ref. torque = 25 in/lb) (Fig. 74)
3. Install the enclosed conversion label (F) to the valve body where it can easily be seen. (Fig. 74)

Valve conversion is complete.

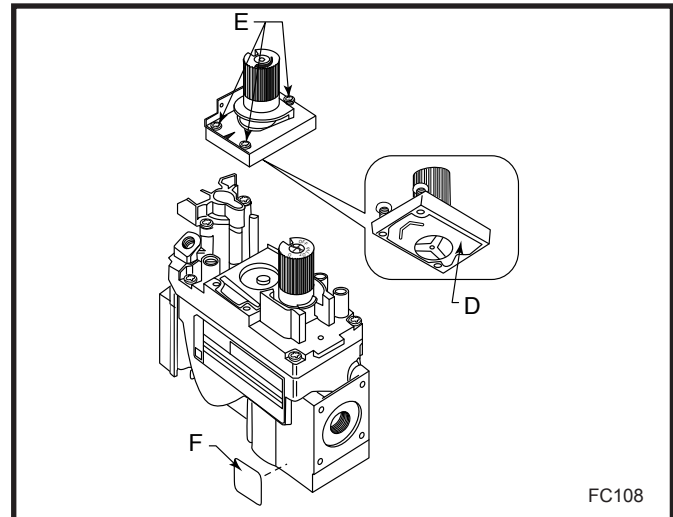


Fig. 74 Replace regulator.

Burner Orifice Conversion

33/36XDV

1. Remove bracket rear log and front grate. (Fig. 75)
2. Remove burner housing assembly and front burner tube. (Fig. 75)
3. Remove burner orifice from manifold assembly using 3/8" wrench. (Fig. 75)
4. Install conversion orifices in place of orifices just removed.

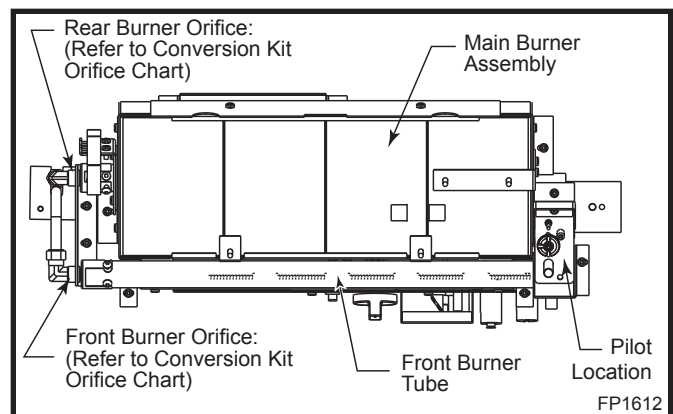


Fig. 75 Remove manifold assembly.

5. Remove air shutters from burner pan by removing shutter retaining screw then air shutter. (Fig. 76)
6. For 36XDV replace only rear air shutter.
Natural Gas: Rear air shutter, close two sides, top and bottom open.
Front air shutter, fully open.

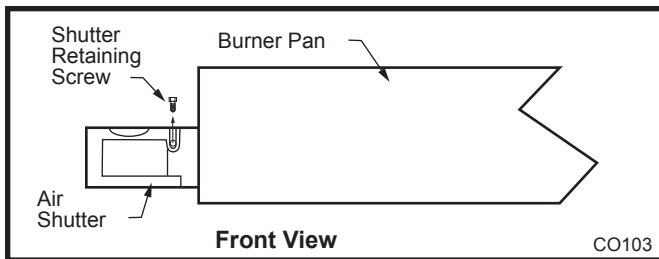


Fig. 76 Remove air shutter from burner pan.

LP: Rear air shutter fully open.

Front air shutter fully open.

7. Reinstall burner housing assembly and front burner tube.

Burner Orifice Conversion

39XDV

1. Remove the two (2) screws which secure the burner tube assembly/fettle and the two (2) screws located behind the burner tube assembly which secure the diverter. Remove the four (4) screws that secure the burner housing assembly to the base pan at the right and left end of the burner housing assembly. (Fig. 77)

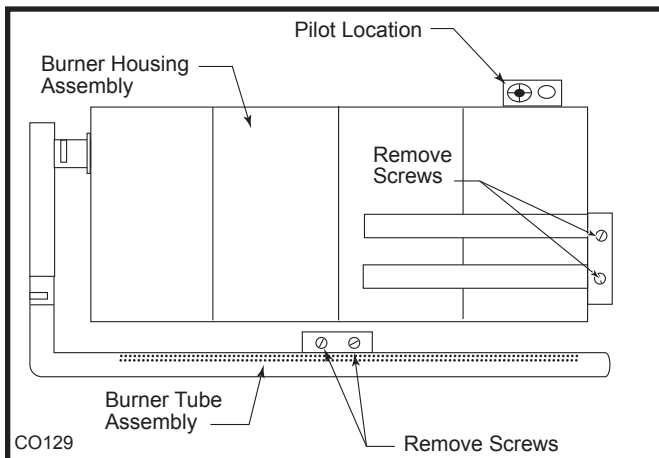


Fig. 77 Remove screws holding burner housing assembly and burner tube assembly.

2. Remove the fettle and the burner tube assembly. Slide the burner housing assembly to the right and up to free the orifice.
3. Using a 1/2" open end wrench remove the orifices. (Fig. 78)

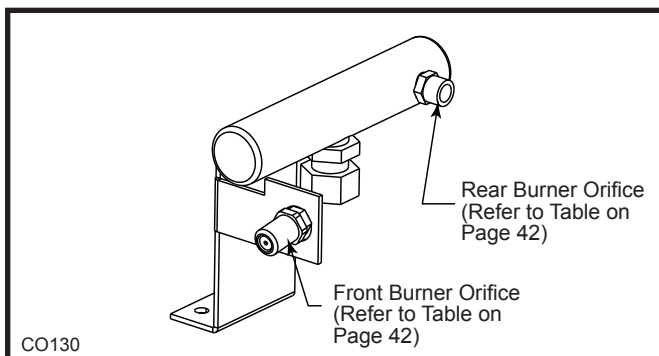


Fig. 78 Burner orifice replacement.

4. Converting LP to NG, remove bracket/gasket assembly by unfastening the screw which secures the bracket to the burner tray base. Discard bracket and refasten the screw into the hole. (Fig. 79)

Converting NG to LP, assemble the bracket/gasket assembly to the burner tray assembly base by unfastening the screw on the tray to the right side of the orifice. Slide the bracket/gasket assembly over the fitting on the manifold toward the back with the gasket to the right. Secure the bracket/gasket assembly using the screw removed earlier. (Fig. 79)

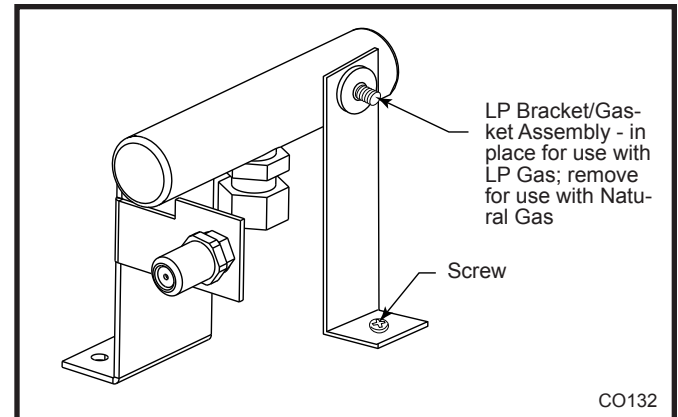


Fig. 79 LP bracket/gasket assembly.

5. Replace the orifices according to the table on Page 45.
 6. Replace the burner housing with the new one provided in kit.
 7. Reassemble the burner housing assembly, the burner tube assembly and the fettle in reverse order.
- NOTE:** It is not necessary to remove the pilot tube for conversion.

Pilot Orifice Conversion

1. Remove pilot hood by lifting up. (Fig. 80)
2. Remove pilot orifice with allen wrench. (Fig. 81)
3. Install conversion pilot orifice.

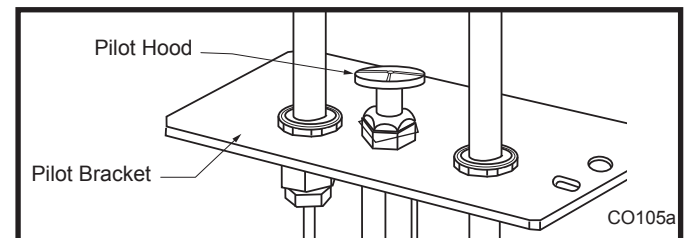


Fig. 80 Remove pilot hood.

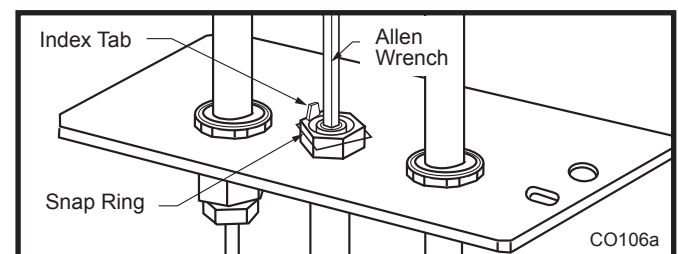


Fig. 81 Remove pilot orifice.

4. Reinstall pilot hood and be sure to align with index tab.
 5. Turn the gas supply valve and gas valve on and test for leaks. Use a 50/50 solution of liquid soap and water to test for leaks at gas fittings and joints. Apply water/soap solution with brush only - **do not over apply. NEVER test with an open flame.**
 6. Follow procedure on rating plate to light the pilot. Check for leaks.
 7. Turn main burner on and check for leaks.
 8. Turn the gas supply valve and gas valve on and test for leaks. Use a 50/50 solution of liquid soap and water to test for leaks at gas fittings and joints. Apply water/soap solution with brush only - **do not over apply. NEVER test with an open flame.**
 9. Follow procedure on rating plate to light the pilot. Check for leaks.
 10. Turn main burner on and check for leaks.
 11. Reinstall bracket rear log, front grate and logs. Refer to Page 26 for proper log placement.
- Installation complete.

Fuel Conversion Instructions Honeywell Comfort Control Valve ONLY



WARNING: The conversion must only be undertaken by a qualified, certified gas appliance installer.

Installation Precautions

Before proceeding, turn control knob on valve to **OFF** and turn gas supply **OFF**. Turn **OFF** any electricity that may be going to the appliance. **CAUTION: Logs may be hot!**

Conversion Procedure

1. Open bottom grille to gain access to valve. Remove glass door. (Refer to "Window Frame Assembly Removal Section" Page 25, Fig. 48)
2. Remove logs if previously installed. **CAUTION: Logs may be hot!**
3. Remove and replace plug on lower right hand side of the valve; Red for LP and blue for NG. (Fig. 82)
4. Remove motor top cap. Depress and turn center plunger until arrow points to correct screw. Red for LP and Blue for NG. **NOTE:** Plunger will "snap" into NG position when arrow is close to blue screw. It will not "snap" at LP (Red) position. (Fig. 83)

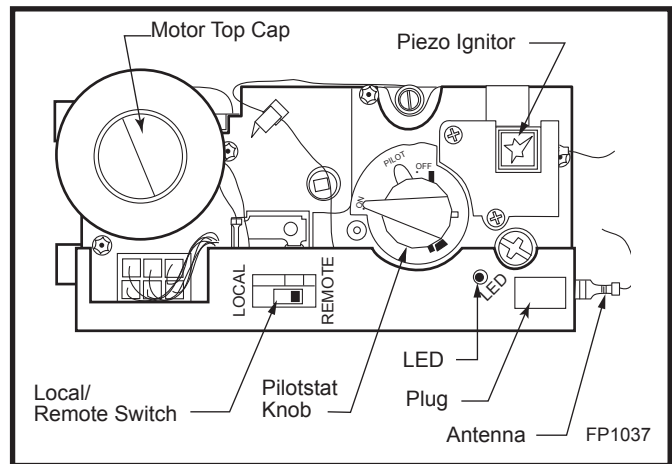


Fig. 82 Comfort control valve.

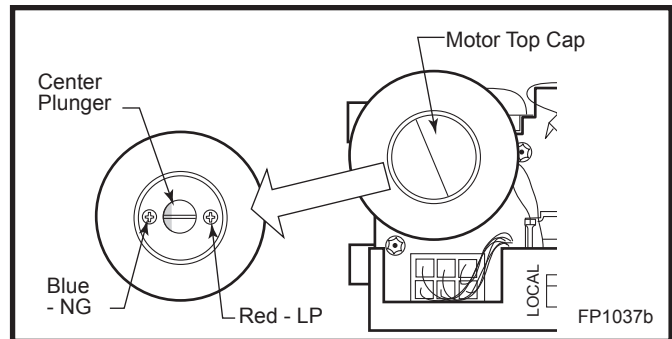


Fig. 83 Depress and turn center plunger.

Burner Orifice Conversion 33/36XDV

1. Remove bracket rear log and front grate. Remove burner housing assembly and front burner tube.
2. Remove burner orifice from manifold assembly using 7/16" wrench. (Fig. 84)
3. Install conversion orifice in place of orifice just removed. Refer to Table 2.
4. Remove both air shutters from burner pan by removing air shutter retaining screw then air shutter. (Fig. 85)

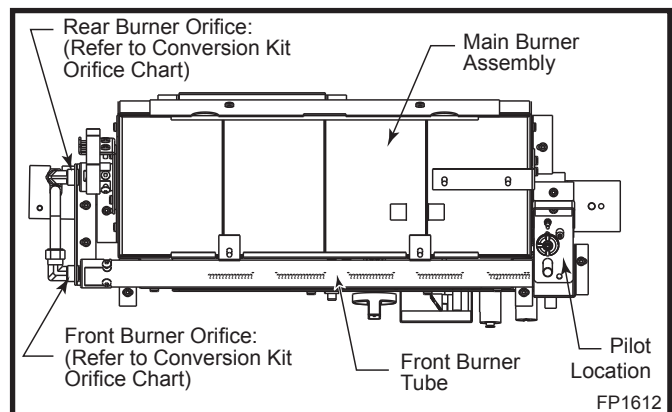


Fig. 84 Remove burner assembly.

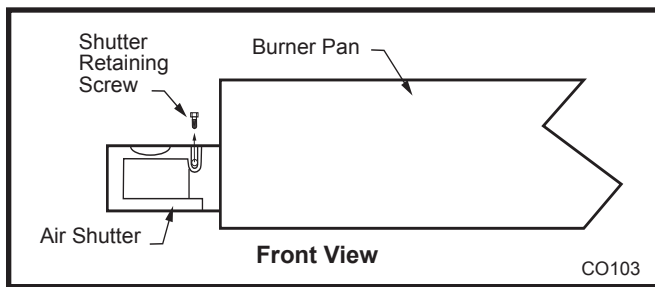


Fig. 85 Remove air shutter from burner pan.

5. Install conversion air shutters on burner pan. Replace air shutter retaining screw. Adjust both air shutters. Refer to Table 1 for proper air shutter adjustment. Secure air shutter retaining screw.
6. Reinstall burner housing assembly and front burner tube.

39XDV

1. Remove the two (2) screws which secure the burner tube assembly/fettle and the two (2) screws located behind the burner tube assembly which secure the diverter. Remove the four (4) screws that secure the burner housing assembly to the base pan at the right and left end of the burner housing assembly. (Fig. 77)
2. Remove the fettle, the burner tube assembly and the diverter. Slide the burner housing assembly to the right and up to free the orifice.
3. Using a 1/2" open end wrench remove the orifices. (Fig. 78)
4. Converting LP to NG, remove bracket/gasket assembly by unfastening the screw which secures the bracket to the burner tray base. Discard bracket and refasten the screw into the hole. (Fig. 79)
Converting NG to LP, assemble the bracket/gasket assembly to the burner tray assembly base by unfastening the screw on the tray to the right side of the orifice. Slide the bracket/gasket assembly over the fitting on the manifold toward the back with the gasket to the right. Secure the bracket/gasket assembly using the screw removed earlier. (Fig. 79)
5. Replace the orifices according to the table on Page 45.

6. Replace the burner housing with the new one provided in kit.
7. Reassemble the burner housing assembly, the burner tube assembly and the fettle in reverse order.

Pilot Orifice Conversion

NOTE: It is not necessary to remove the pilot tube for conversion.

1. Loosen pilot hood turning counterclockwise using a 7/16" wrench. (Fig. 86)
2. Remove pilot orifice with needlenose pliers. (Fig. 87)
3. Install conversion pilot orifice.
4. Reinstall pilot hood. Be sure to align pilot hood with index marks.
5. Turn the gas supply valve and gas valve on and test for leaks. Use a 50/50 solution of liquid soap and water to test for leaks at gas fittings and joints. Apply water/soap solution with brush only - **do not over apply. NEVER test with an open flame.**
6. Follow procedure on rating plate to light the pilot. Check for leaks.
7. Turn main burner on and check for leaks.
8. Reinstall bracket rear log, front grate and logs. Refer to Page 26 for proper log placement.

Installation complete.

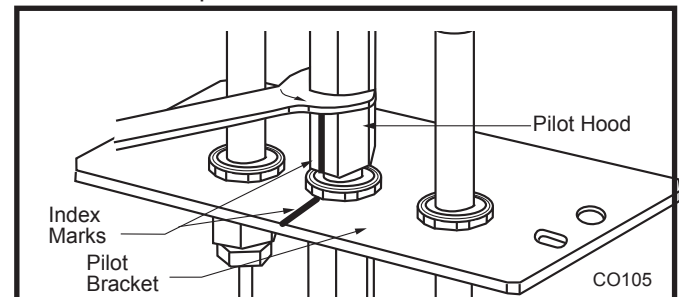


Fig. 86 Remove pilot hood.

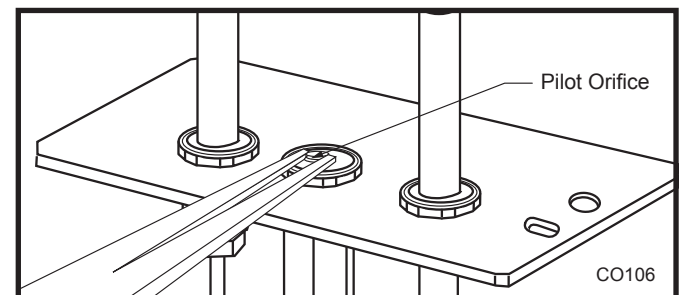


Fig. 87 Remove pilot orifice.

Table 1 Injector Orifice Size Matrix

Conversion to Natural Gas							
Kit #	Model	Burner Orifice				Input (BTU/hr)	
		Front	Part #	Rear	Part #	Minimum	Maximum
20011506	39XDVRP	#53 (.059")	20007347	#44 (.086")	30000334	6,700	30,000
Conversion to LP							
Kit #	Model	Burner Orifice				Input (BTU/hr)	
		Front	Part #	Rear	Part #	Minimum	Maximum
20011505	39XDVRN	#64 (.036")	20010935	#54 (.055")	20000130	5,800	30,000
20011504	39XDVEN						

Maintenance

Burner and Burner Compartment

It is important to keep the burner and the burner compartment clean. At least once per year the logs and lava rock/ember material should be removed and the burner compartment vacuumed and wiped out. Remove and replace the logs as per the instructions in this manual.



Always handle the logs with care as they are fragile and may also be hot if the fireplace has been in use.

FK24/FK12 Fan Assembly

The fan unit requires periodic cleaning. At least once per month in the operating season, open the lower louver panels and wipe or vacuum the area around the fan to remove any build up of dust or lint.

Brass Trim

Clean the brass trim pieces using a soft cloth lightly dampened with lemon oil. Do not use water or household cleaners on any brass components.

Contact your local representative to arrange an annual service program.

Cleaning the Standing Pilot Control System

The burner and control system consists of

- burner tube • gas orifice
- pilot assembly • thermopile
- millivolt gas valve

Most of these components may require only an occasional checkup and cleaning and some may require adjustment. **If repair is necessary, it should be performed by a qualified technician.**



Logs May Be HOT!!

1. Turn off pilot light at gas valve side.
2. Let fireplace cool if it has been running.
3. Remove window frame assembly. (Refer to Window Frame Assembly Removal section)
4. Remove logs.
5. Vacuum burner compartment especially around orifice primary air openings.
6. Visually inspect pilot. Brush or blow away any dust or lint accumulation.
7. Reinstall logs.
8. Ignite pilot - Refer to Lighting Instructions.
9. Reinstall window frame assembly.

To obtain proper operation, it is imperative that the pilot and burner's flame characteristics are steady, not lifting or floating.

Typically, the top 3/8" or 1/2" of the thermopile should be engulfed in the pilot flame. (Fig. 88)

To adjust pilot burner; (by qualified service technician)

1. Remove pilot adjustment cap.
2. Adjust pilot screw to provide properly sized flame.
3. Replace pilot adjustment cap.

The primary air shutter is set at factory and should only be adjusted, if necessary, by a qualified service technician.

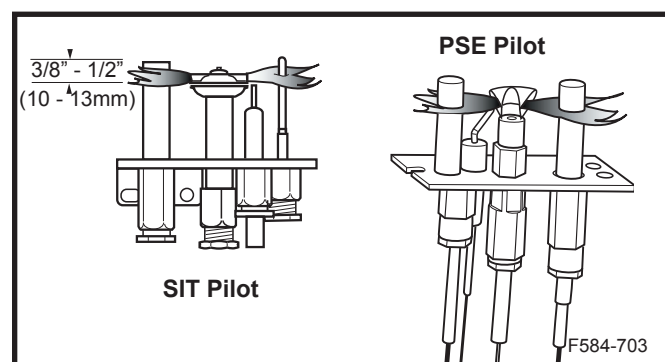
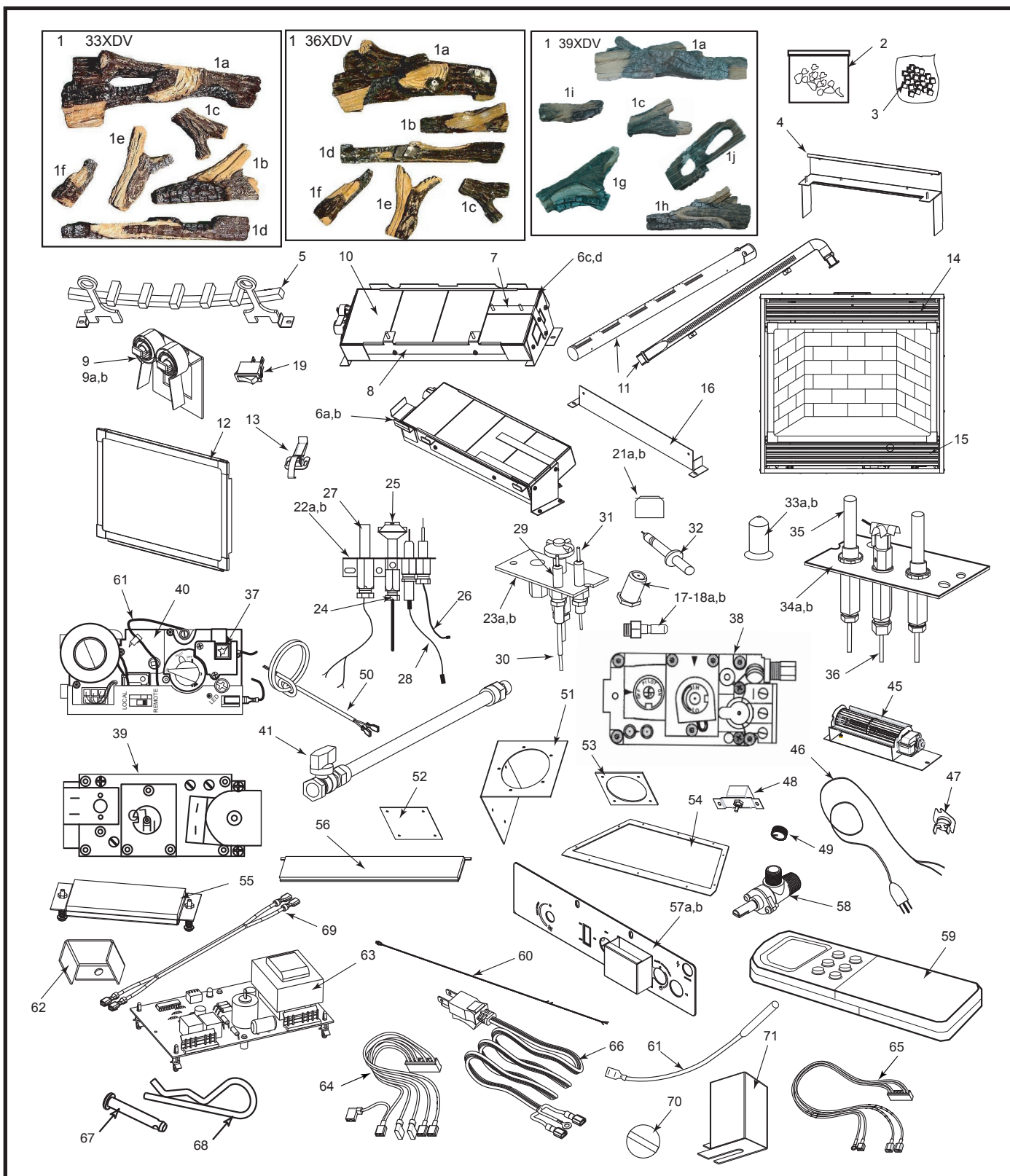


Fig. 88 Correct pilot flame appearance.



CFM Corporation reserves the right to make changes in design, materials, specifications, prices and discontinue colors and products at any time, without notice.

33XDV/36XDV/39XDV

Units: GFDE3I1, GFDN3I1, GFDE3J1, GFDI3J1, GFDN3J0, GFDE3K1, GFDN3K1, GFDL3I1, GFDL3J1

33XDV/36XDV/39XDV (continued)

Ref.	Description	33XDV	36XDV	39XDV
1.	Log Set (Complete)	10009399	10009367	20010991
1a.	Log Rear	10009392 (A49)	10009361 (B152)	20010994
1b.	Log Center Right	10009394 (A51)	10009362 (B153)	--
1c.	Log Right Top	10009395 (A52)	10009363 (B154)	20010995
1d.	Log Front	10009393 (A50)	10009364 (B155)	--
1e.	Log Cross Over Center	10009396 (A53)	10009365 (B156)	--
1f.	Log Left Top	10009397 (A54)	10009366 (B157)	--
1g.	Log Top Center	--	--	20010677
1h.	Log Front Right	--	--	20011514
1i.	Log Front Left	--	--	20010996
1j.	Log Overlay	--	--	20010674
2.	Volcanic Lava Rock (1lb pkg)	10001454	10001454	20000376
3.	Embers Package	51915	51915	0005219
4.	Bracket Rear Log Assembly Black	10009403	10008856	20011363
5.	Grate Assembly Black	10008831	10008831	20010490
6a.	Burner Housing Assembly - NG	--	--	20011347
6b.	Burner Housing Assembly - LP	--	--	20011528
6c.	Burner Housing Assembly - NG	10009163	10008864	--
6d.	Burner Housing Assembly - LP	10009744	10010125	--
7.	Brkt Support Center Log Assembly	10009024	10009024	--
8.	Angle Front Log Support Assembly	10009386	10009142	--
9.	Bi-metal Air Shutter Assembly	10009140	10009140	--
9a.	Bi-metal Air Shutter Assembly (NG)	--	--	20011350
9b.	Bi-metal Air Shutter Assembly (LP)	--	--	20010666
10.	Ceramic Tile	57803	57803	57803
11.	Burner Tube Assembly	10009168	10009157	20010580
12.	Window Assy w/ Glass	10009483	10007490	10007971
13.	Clamp Frame Window	54174	54174	54174
14.	Louvre Assembly Top	10007400	10007090	10007984
15.	Louvre Assembly Bottom	10007397	10007092	10007986
16.	Bracket Burner Tube	10009146	10009155	--
17a.	Orifice Rear Burner - Nat.	Refer to Rating Plate for Orifice Size		
17b.	Orifice Rear Burner - LP	Refer to Rating Plate for Orifice Size		
18a.	Orifice Front Burner - Nat.	Refer to Rating Plate for Orifice Size		
18b.	Orifice Front Burner - LP	Refer to Rating Plate for Orifice Size		
19.	Switch Rocker	53606	53606	53606
20.	Remote Switch Kit (not shown)	20010793	20010793	20010793
21a.	Orifice Pilot - Nat.	10002268	10002268	10002268
21b.	Orifice Pilot - LP	10002269	10002269	10002269
22a.	Pilot Assembly SIT (RN)	10002264	10002264	10002264
22b.	Pilot Assembly SIT (RP)	10002265	10002265	10002265
23a.	Pilot Assembly SIT (EN)	10002387	10002387	10002387
23b.	Pilot Assembly SIT (EP)	10002388	10002388	10002388
24.	Pilot Tubing w/Fittings SIT	10001296	10001296	10001296
25.	Pilot Hood	10002385	10002385	10002385
26.	Thermocouple (RN/RP)	53373	53373	53373
27.	Thermopile (RN/RP)	51827	51827	51827
28.	Electrode Ignitor w/Cable (RN/RP)	10001297	10001297	10001297
29.	Electrode Ignitor (EN/EP)	52465	52465	52465
30.	Cable Ignitor (EN/EP)	10000696	10000696	10000696
31.	Sensing Electrode (EN/EP)	57885	57885	57885
32.	Ignitor Piezo w/Nut SIT	50932	50932	50932

33XDV/36XDV/39XDV (continued)

Ref.	Description	33XDV	36XDV	39XDV
33a.	Orifice Pilot Nat. RF	--	20000908	n/a
33b.	Orifice Pilot LP RF	--	20000907	n/a
34a.	Pilot Assembly Nat. RF	--	20002266	n/a
34b.	Pilot Assembly LP RF	--	20002268	n/a
35.	Thermopile (RF)	--	20002400	n/a
36.	Pilot Tubing w/Fittings PSE	--	10003279	n/a
37.	Ignitor Piezo Honeywell	--	20000062	n/a
38.	Valve SIT 820.662 (RN)	20010563	20010563	20010563
39.	Valve SIT EN	20011013	20011013	20011013
40.	Valve HW RFN Conv RV8310E	--	20003719	n/a
41.	Flexible Gas Line w/ON/OFF Shut-off	20002500	20002500	20002500
42.	Manifold Tubing w/fittings (not shown)	57318	57318	57318
43.	Fan Kit Assembly FK24 (Optional, not shown)	ZA1100	ZA1100	ZA1100
44.	Fan Kit Assembly FK12 (Optional, not shown)	ZA1110	ZA1110	ZA1110
45.	Fan w/Bracket	54103	54103	n/a
46.	Electrical Cord (6ft) Fan Kits	51865	51865	51865
47.	Fan Temperature Sensor (FK24)	51704	51704	51704
48.	Speed Control (FK24)	51738	51738	51738
49.	Speed Control Knob (FK24)	51882	51882	51882
50.	Remote Switch Wire Assembly	20010345	20010345	20010345
51.	Gasket Plate Air Inlet	10008179	10007706	10007706
52.	Gasket Plate Cover Flue Products	10002233	10002233	10002233
53.	Gasket Plate Cover Flue Pipe	10002237	10002237	10002237
54.	Gasket Burner Base	10007387	10007087	10007980
55.	Relief Plate Assembly (Burner Base)	10004192	10004192	10004192
56.	Relief Plate Assembly	10007396	10002429	10007967
57a.	Console Assembly RN/RP	10009153	10009153	10009153
57b.	Console Assembly RF	--	10009377	n/a
58.	Valve ON/OFF	10009138	10009138	10009138
59.	Transmitter	--	20002047	n/a
60.	Cord Set RF Valve	--	20002541	n/a
61.	Antennae HW395783-1 RFN/RFP Valve	--	20003561	n/a
62.	Shield Heat Pilot	10000248	10000248	10000248
63.	Ignition Control Synetek (EN)	10007939	10007939	10007939
64.	Wire Harness (EN) Synetek (low voltage)	10008139	10008139	10008139
65.	Wire Harness (EN) Synetek	10008140	10008140	10008140
66.	Electrical Cord (6ft) Ignition Control	10008298	10008298	10008298
67.	Clevis Pin	10008615	10008615	10008615
68.	Clip Pin Hitch	10008616	10008616	10008616
69.	Wire w/Terminals Assembly	10009179	10009179	10009179
70.	Knob Valve ON/OFF	76525	76525	76525
71.	Shield Pilot Front	10009404	10009154	--

Fuel Conversion Kits

Conversion Kit, NG to LP

33XDV	Kit # 10009427
36XDVRN/EN	Kit # 10009419
36XDVRFN	Kit # 10008276
39XDVRN	Kit # 20011505
39XDVEN	Kit # 20011504

Conversion Kit, LP to NG

33XDV	Kit # 10009429
36XDVRP/EP	Kit # 10009421
36XDVRFP	Kit # 10008277
39XDVRP	Kit # 20011506

Optional Accessories Available

Fan Kits

FK12 Fan Assembly

1. Open louvre assembly bottom.
2. Install FK12 fan in back of unit between hearth supports. (Fig. 89)
3. Secure fan on velcro strips.
4. Power to the fan can be supplied by plugging the supply lead into a conveniently located wall socket or by using a hard-wired EB-1 connector box.
5. Be sure fan motor does not touch hearth supports.

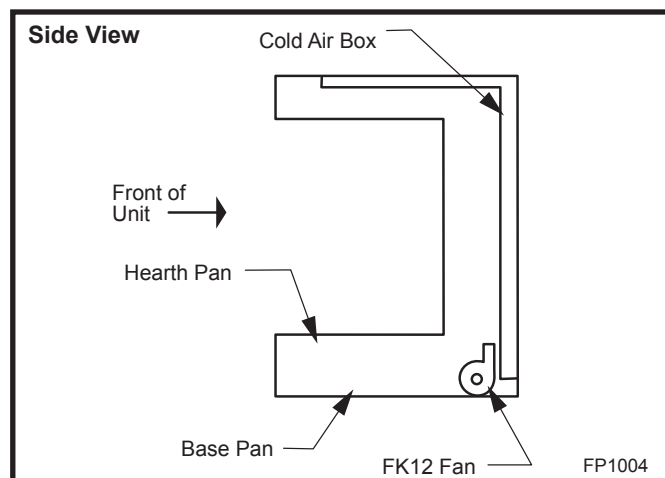


Fig. 89 FK12 Fan Kit placement.

FK24 Fan Assembly

Fan specifications: 120 volt, 60 Hz, .75 Amp.

This fan does not need regular maintenance, however periodic cleaning is required. Check the area under the control door and in front of the fan and wipe or vacuum at least once a month during the operating season. Should this fan require servicing, the power supply must be disconnected.

The FK24 comes with the electrical cord attached.

1. Slide fan assembly from the left side into the fireplace opening, line up mounting holes with screw studs on back of fireplace and fasten with #10 - 24 hex nuts. (Fig. 91)
2. Install thermal sensor on bottom of firebox using #10 - 24 hex nuts.
3. **(Option A)** - Place electronic fan speed control box on bottom of fireplace base, lining up mounting holes with screw studs. Fasten fan speed control box with #10 - 24 hex nuts.
(Option B) - The speed control can be installed in an electrical box at normal wall switch height for convenient access.
4. The power supply may be connected in 2 ways:

Method A

Route the 6' (1.8m) lead fitted to the unit to a conveniently located wall socket.

Method B

If the EB-1 receptacle box (Pt. #ZA1200) was correctly connected when the unit was installed, the fan lead can be directly plugged into the EB-1 plug socket.

5. Whether wiring directly to the fan junction box (Option A) or into the EB1 (electrical box, Option B) first ensure cable is secured using box connector.



The fireplace, when installed must be electrically connected and grounded in accordance with local codes, with the current CSA C22.1 Canadian Electrical Code or for US installations, follow local codes and the National Electrical Code, ANSI/NFPA No. 70.

Hard (Direct) Wire Hook Up

First connect ground wire to ground stud located on the base of either box. Black wire from supply should connect to the variable speed switch. Alternate speed switch wire connects to temperature sensor. Alternate lead from sensor connects to fan. Alternate fan lead connects back to the white supply wire. (Fig. 91)



Any electrical rewiring of this fan must be completed by a qualified electrician.

Turn off all power before hook up.

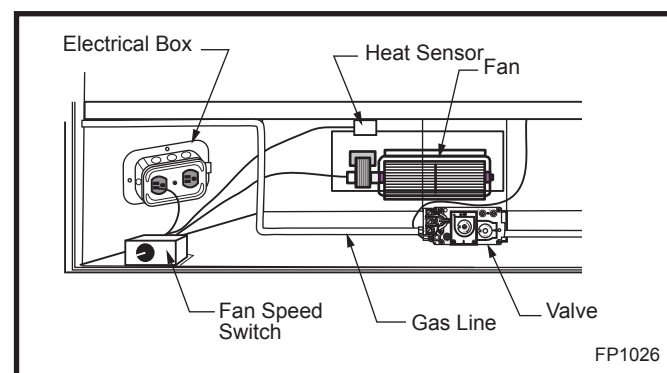


Fig. 90 FK24 fan placement.

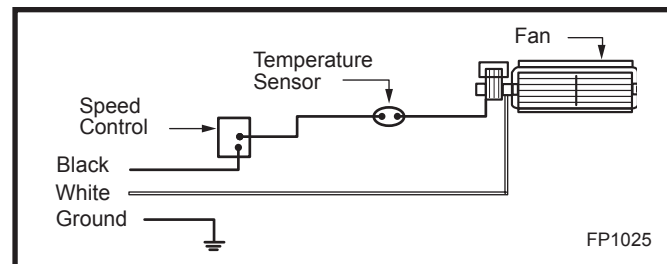


Fig. 91 FK24 fan wiring.

Remote Controls

Optional remote control units are available to control different functions of the appliance. (For use on R Models)

Model	Functions Controlled
RC1	ON/OFF
RC2	ON/OFF and Temperature
IMTFK	Wall mounted thermostat control

Ceramic Refractory Panels

Unit	Kit Model and Finishings			
	Sandstone	Red	Black	Grey
33XDV	GAHC3I0	GAFC3I0	GABC3I0	GAGC3I0
36XDV	GAHC3J0	GAFC3J0	GABC3J0	GAGC3J0
39XDV	GAHC3K0	GAFC3K0	GABC3K0	GAGC3K0



Take care when handling the refractory panels as they are fragile until held in place and supported.

Installation Instructions

1. Remove window frame assembly and logs.
2. Remove three (3) screws securing heat shield to combustion dome. (Fig. 92)
3. Place rear ceramic panel in back of unit. (Fig. 93)
4. Place side panels.
5. Re-install heat shield, logs and window frame assembly.

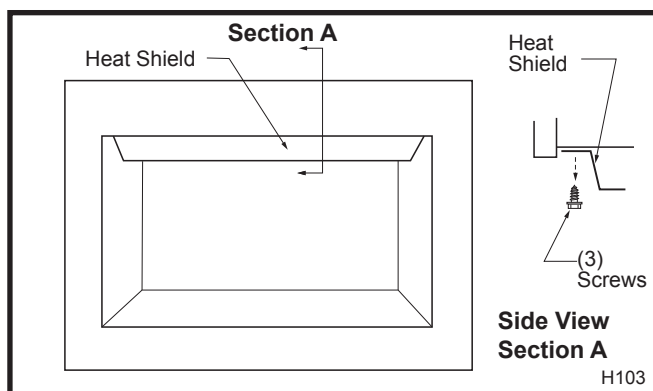


Fig. 92 Heat shield.

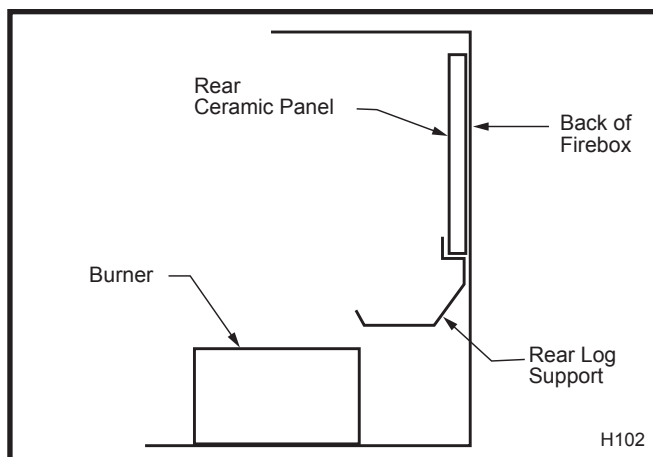


Fig. 93 Rear ceramic panel placement.

Optional Trim Kits

Louvre Accent Trim

Appliance Model Main Louvre Kit Additional Louvre

Polished Brass		
36XDV	36DVLMP	36DVLAP
39XDV	39DVLMP	39DVLAP
Rustic Bronze		
33XDV	33DVLMP	33DVLAR
36XDV	36DVLMP	36DVLAR
Pewter		
33XDV	33DVLMS	33DVLAS
36XDV	36DVLMS	36DVLAS
39XDV	39DVLMS	39DVLAS

Regular Trim Kit

Appliance Model	Trim Kit	
33XDV	33DVRTKS	Pewter
33XDV	33DVRTKR	Rustic Bronze

Adjustable Regular Trim Kit

Appliance Model	Trim Kit	
36XDV	ADVRRKS	Pewter
36XDV	ADVRTKR	Rustic Bronze
39XDV	ADVRRKS	Pewter
39XDV	ADVRTKR	Rustic Bronze

Medium Trim Kit

Appliance Model	Trim Kit	
33XDV	33DVMTKS	Pewter
33XDV	33DVMTKB	Black

Adjustable Medium Trim Kit

Appliance Model	Trim Kit	
36XDV	ADVMTKP	Polished Brass
36XDV	ADVMTKS	Pewter
36XDV	ADVMTKB	Black
39XDV	ADVMTKP	Polished Brass
39XDV	ADVMTKS	Pewter
39XDV	ADVMTKB	Black

Screen Door Kit

Appliance Model	Kit Model	
33XDV	33DVSDKS	Pewter
36XDV	36DVSDKS	Pewter
33XDV	33DVSDKB	Black
36XDV	36DVSDKB	Black
39XDV	39DVSDKB	Black
36XDV	36DVSDKR	Rustic Bronze

Filigree Louvre Kit

Appliance Model	Kit Model	
33XDV	33DVFKB	Black
36XDV	36DVFKB	Black
36XDV	36DVFKS	Pewter
36XDV	36DVFKR	Rustic Bronze

Arch/Square Face Kit

for the 36XDV

Romanesque - Arch		
	36DVARFKB	Black
	36DVARFKR	Rustic Bronze
	36DVARFKS	Pewter
Romanesque - Square		
	36DVSRFKB	Black
	36DVSRFKR	Rustic Bronze
	36DVSRFKS	Pewter
Marquette - Arch		
	36DVAMTKB	Black
	36DVAMTKR	Rustic Bronze
	36DVAMTKS	Pewter
Marquette - Square		
	36DVSMTKB	Black
	36DVSMTKR	Rustic Bronze
	36DVSMTKS	Pewter

LIMITED LIFETIME WARRANTY

PRODUCT COVERED BY THIS WARRANTY

All Vermont Castings gas stoves, gas inserts, and gas fireplaces, and all Majestic brand gas fireplaces equipped with an Insta-Flame Ceramic Burner, or standard steel tube burner.

BASIC WARRANTY

CFM Corporation (hereinafter referred to collectively as the Company) warrants that your new Vermont Castings or Majestic Gas Fireplace/Stove is free from manufacturing and material defects for a period of one year from the date of purchase, subject to the following conditions and limitations.

EXTENDED LIFETIME WARRANTY

The heat exchanger, where applicable, and combustion chamber of every Vermont Castings or Majestic gas product is warranted for life against through wall perforation. All appliances equipped with an Insta-Flame Ceramic Burner have limited lifetime coverage on the ceramic burner plaque. Warrantees are made to the original owner subject to proof of purchase and the conditions and limitations listed on this Warranty Document

COMPONENT WARRANTY

CAST IRON: All external and internal cast iron parts are warranted for a period of three years.

Note: On porcelain enamel finished external parts and accessories The Company offers no Warranty on chipping of enamel surfaces. Inspect all product prior to accepting it for any damage to the enamel.

The salt air environment of coastal areas or a high humidity environment can be corrosive to the porcelain enamel finish. These conditions can cause rusting of the cast iron beneath the porcelain enamel finish, which will cause the finish to flake off.

Dye lot variations with replacement parts and/or accessories can occur and are not covered by warranty.

GLASS DOORS: Glass doors are covered for a period of one year. Glass doors are not warranted for breakage due to misuse or accident. Glass doors are not covered for discoloration or burned in stains due to environmental issues, or improper cleaning and maintenance.

BRASS PLATED PARTS AND ACCESSORIES: Brass parts should be cleaned with Lemon oil only. Brass cleaners cannot be used. Mortar mix and masonry cleaners may corrode the brass finish. The Company will not be responsible for, nor will it warrant any brass parts which are damaged by external chemicals or down draft conditions.

GAS VALVES: Gas valves are covered for a period of one year

ELECTRONIC AND MECHANICAL COMPONENTS: Electronic and mechanical components of the burner assembly are covered for one year. All steel tube burners are warranted for one year.

ACCESSORIES: Unless otherwise noted all components and CFM Corporation company supplied accessories are covered for a period of one year.

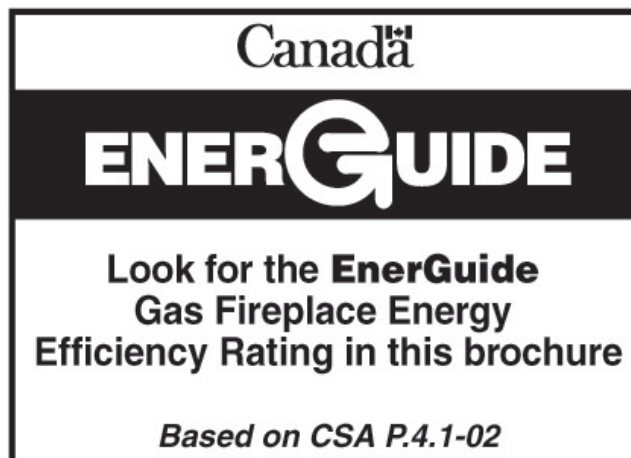
CONDITIONS AND LIMITATIONS

- This Vermont Castings or Majestic product must be installed or serviced by a qualified installer, preferably NFI or WETT (Canada) certified, as prescribed by the local jurisdiction. It must be installed and operated at all times in accordance with the Installation and Operating instructions furnished with the product. Any alteration, willful abuse, accident, or misuse of the product shall nullify this warranty.
- This warranty is non-transferable, and is made to the original owner, provided that the purchase was made through an authorized supplier of the Company.
- The customer must pay for any Authorized Dealer in-home travel fees or service charges for in-home repair work. It is the dealers option whether the repair work will be done in the customer's home or in the dealer's shop.
- If upon inspection, the damage is found to be the fault of the manufacturer, repairs will be authorized at no charge to the customer parts and/or labor.

- Any part and/or component replaced under the provisions of this warranty is covered for six months or the remainder of the original warranty, whichever is longest.
- This warranty is limited to the repair of or replacement of part(s) found to be defective in material or workmanship, provided that such part(s) have been subjected to normal conditions of use and service, after said defect is confirmed by the Company's inspection.
- The company may, at its discretion, fully discharge all obligations with respect to this warranty by refunding the wholesale price of the defective part(s)
- Any installation, labor, construction, transportation, or other related costs/expenses arising from defective part(s), repair, replacement, or otherwise subjected to normal conditions of use and service, nor shall the Company assume responsibility for same. Further, the Company will not be responsible for any incidental, indirect, or consequential damages except as provided by law.
- *SOME STATES DO NOT ALLOW FOR THE EXCLUSION OR LIMITATIONS OF INCIDENTAL AND CONSEQUENTIAL DAMAGES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOUR CIRCUMSTANCES. THIS WARRANTY GIVES YOU SPECIFIC RIGHTS AND YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.*
- All other warranties-expressed or implied- with respect to the product, its components and accessories, or any obligations/liabilities on the part of the Company are hereby expressly excluded.
- The Company neither assumes, nor authorizes any third party to assume on its behalf, any other liabilities with respect to the sale of this Vermont Castings or Majestic product
- The warranties as outlined within this document do not apply to chimney components or other non CFM Corporation accessories used in conjunction with the installation of this product..
- Damage to the unit while in transit is not covered by this warranty but is subject to claim against the common carrier. Contact the dealer from whom you purchased your fireplace/stove (do not operate the appliance as this might negate the ability to process the claim with the carrier).
- The Company will not be responsible for:
 - a) Down drafts or spillage caused by environmental conditions such as near-by trees, buildings, roof tops, hills, or mountains.
 - b) Inadequate ventilation or negative air pressure caused by mechanical systems such as furnaces, fans, clothes dryers, etc.
- This warranty is void if:
 - a) The fireplace has been operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals.
 - b) The fireplace has been subjected to prolonged periods of dampness or condensation
 - c) Any damages to the fireplace, combustion chamber, heat exchanger or other components due to water, or weather damage, which is the result of but not limited to, improper chimney/venting installation.
 - d) Any alteration, willful abuse, accident, or misuse of the product has occurred.

IF WARRANTY SERVICE IS NEEDED...

- 1) Contact your supplier. Make sure you have your warranty, your sales receipt, and the model/serial number of your CFM Corporation product.
- 2) DO NOT ATTEMPT TO DO ANY SERVICE WORK YOURSELF.



Efficiency Ratings				
Model	EnerGuide Ratings Fireplace Efficiency (%)	Steady State (%)		D.O.E. (AFUE%)
		Fan-OFF	Fan-ON	
33XDVRN	60.1	80	81	64
33XDVRP	60.1	81	82	64
33XDVEN	66.2	80	81	64
33XDVEP	66.2	81	82	64
36XDVRN	61.8	83	84	64
36XDVRP	61.8	84	85	64
36XDVRFN	61.8	83	84	64
36XDVRFP	61.8	84	85	64
36XDVEN	66.6	83	84	64
36XDVEP	66.6	84	85	64
39XDVRN	61.6	80	81	64
39XDVRP	61.6	81	82	64
39XDVEN	65.8	80	81	64
39XDVEP	65.8	81	82	64

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FIREPLACE
INSTITUTE®



CERTIFIED

www.nficertified.org

We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

CFM Corporation

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